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ECONOMIC THOUGHT AND ITS INSTITUTIONAL BACKGROUND

CHAPTER I

THE FACTORS IN ECONOMIC ANALYSIS

MODERN industry depends upon the co-ordinated functioning of many processes, the maintenance of law and order, the growing or extraction of raw materials, the fabricating, distributing, transporting, and consuming of goods, the paying, spending, or saving of money incomes, the invention or improvement of instruments of production, the granting or restricting of credits. The problem of classifying these processes under a number of headings or terms so that the total process shall be amenable to logical analysis, and shall yield generalizations with some degree of probability, is one of the problems of the economic theorist. The traditional classification of all factors under the three heads of land, labour, and capital is highly abstract. Land is the environmental factor. Capital is the sum-total of instruments produced to aid in further production. Labour is the contribution of human beings aside from their creation of capital. Even if there is added a fourth factor—entrepreneurship, or the organization of the other factors—the categories are so wide, the classifications so abstract that it is hard to connect vitally an economic analysis based on these classifications with actual complex economic life.

It is true, however, that the kind of categories needed depends on the nature of the problems in hand. If one were aiming, as in the case of the classical economists, at the formulation of the general laws of wages, interest, and rent, an estimate of trends or relative rates of growth of population, natural resources, capital, and industrial improvements gives the data for thinking out the problem in terms of general

formulations. In the case of the economic problems of modern industrial managers these factors or categories would be too few and too abstract. Here capital and labour might be subdivided into many classes or factors. Skilled and unskilled operations of various kinds, a wide choice of machines, and the interworking of labour and machinery would constitute a set of problems which it is hard to relate with the economist's manipulation of fewer and wider categories.

The problem involved in this study requires a different analysis and classification of factors. The economist to-day does not find general agreement as to the central principles of economic theory among men who have received the most complete training afforded in the universities. There are a number of groups which, although agreeing on some aspects of the subject, are yet far enough apart to be characterized as different schools. There are the neo-classicists, the marginists, the historical economists, the socialists, the communists, the school of pecuniary logic, the institutionalists, the welfare school. Until within a few years the neo-classicists held the position of tradition and authority, at least within the academic field. Now textbooks of other types have in some instances been widely adopted; for example, Edie, *Economics, Principles and Problems*; Keezer, Cutler, and Garfield, *Problem Economics*; and Tugwell, *American Economic Life*. An economist is faced with the decision as to the group with which he will be identified or as to whether, assuming that each school represents a partial analysis of the subject or a description of it from a specific point of view, he is to adopt an eclectic attitude and attempt a synthesis of his own.

The method of approach followed in this study will be to correlate economic theory and industrial history. The factors or categories in some cases will be those of the historians, more numerous and less abstract than those of the early economists, yet less numerous and more abstract than those of the entrepreneur. This approach is taken because in the hands of the historian the human factor has outgrown the category, labour,

and has differentiated into ruler, priest, soldier, landowner, slave, serf, peasant, farmer, merchant, manufacturer, banker, frontiersman, inventor, scientist, professional worker, and so on. There will be economic factors set up to parallel the classes and class conflicts of the historians. Or, in other words, the historical classes will be considered as the possessors and representatives of the different economic factors. From the general point of view of historical development the economic factors considered will be:

1. Natural resources, or land.
2. Government, or law and order.
3. Trade, exchange, and commerce.
4. Money, banking, and credit.
5. Commercial ethics, honesty, commercial usages and traditions.
6. Capital accumulation, frugality, the amassing of goods or money.
7. The invention or improvement of production instruments, or of production processes.
8. Growth of population.
9. The division of labour.
10. Geographical specialization of industry.
11. Management, or the organization of productive factors.
12. Mind or intelligence: instincts, wants, habits, motives, beliefs, ideals, prejudices, complexes, delusions, scientific analysis.

Corresponding roughly with these economic categories are the groups, the relations of which constitute history—rulers, government officials, soldiers, priests, landlords, merchants, craftsmen, inventors, manufacturers, serfs, peasants, farmers.

The economic factor, land, will be represented by such historic classes as the landowning nobility or landlords, plantation owners, peasants, freeholders, pioneers, and frontiersmen. The representatives of law and order are the ruler and subordinate government officials, the military, and in some periods the clergy. Trade, exchange, and commerce are represented by the merchant, the trader, the transporter. Money and currency are represented by the miners of the precious metals, the moneylenders and exchangers, the usurers, the bankers and financial middlemen, the operators of the stock exchanges.

Commercial honesty is a matter of customs and habits arising gradually out of the needs and ordinary activities, and requiring time and the other factors of law and order, trade, finance, and science. Invention is the product of mind or intelligence, working in a complex situation involving a high development of the other factors, especially the discovery of new and significant elements in the physical environment. The division of labour is a factor interacting with growth of population, political stability, rise of commerce, the development of the money economy, the expansion of wants, and the growth of science and technology. The different factors are constantly interacting upon each other, functioning as causes or conditions or results.

In the course of time economic factors change and historical classes change, so that a term, a name, does not necessarily denote an unvarying unit of measurement. Also the factors are not independent variables. Thus, in a certain stage of agriculture, a plough is used which stirs the soil three inches deep. Improvement in intelligence may lead to invention of a plough that stirs the soil to a depth of six inches. The supply of arable land, of economically available land, is thus suddenly increased.

In view of the qualitative or quantitative variation of the objects denoted by fixed terms, and the dynamic character of the genetic approach, it is not expected that this analysis will lead to the exact knowledge that implies the possibility of prediction. The aim is explanation rather than prediction, the explanation of how various types of economic thought came into existence. If this problem is solved, it may throw light on the proper approach to more exact and quantitative methods.

Economic history is the history of the growth in quantity, variety, and complexity of the factors and processes of production. New factors arise, and the old ones vary in importance. As one goes back in time the processes become fewer and simpler. Perhaps the conventional laws of economics, the law of supply and demand, the laws or the principles of increasing and decreasing returns, or the more generalized statement of

the law of proportions, may be applied to these historical elements as well as to the usual economic categories of land, labour, capital, and management. Thus if in a given economic situation there is an abundance of land and of labour, but a scarcity of capital relative to the realizable possibilities of the situation, capital will be the factor of greater relative scarcity; it will have a higher value. Of the necessary or complementary factors it will be the one of greatest scarcity and highest worth. If this factor is increased, the unit cost of the joint product of all the factors will decline, exemplifying the principle of decreasing cost or increasing return. The men who first perceive that capital is the limiting factor, or the one of greatest relative scarcity, are the men of economic and financial insight. And if they proceed to devote themselves to augmenting the supply of the deficient factor, we speak of them as industrial leaders, men of enterprise and initiative. If the supply of capital is increased relative to that of the other factors, a time will come when the right proportion will be reached, the unit cost of the product will be the lowest possible under the given conditions, and production will be carried on according to the principle of constant costs. If the supply of capital relative to that of the other factors is increased beyond this point, the most advantageous combination will be destroyed, the cost per unit of the product will increase, and production will operate according to the principle of increasing cost or diminishing returns. The most advantageous combination, however, is precarious and liable to be temporary. A war, a drought, the discovery of a new raw material, a new invention, the growth of population, or any one or a combination of changes may alter the nature of the lowest cost or most efficient combination of factors.

The purveyor of an increased supply of a deficient factor may reap a great reward until the deficiency is overcome. In other words, in a dynamic situation where wants are changing, old wants declining, and new wants appearing in their place, and where rapid change and improvement is made in the

mechanism and organization by which these wants are satisfied, there is a great advantage accruing to those who foresee changes in demand and who exhibit initiative in redirecting productive energy to the satisfaction of these new wants. Under conditions of industrial change, demand in certain fields for some time exceeds supply; and high profits, large salaries, social prestige, or even political power are the rewards for priority in the new field. The class of people who exhibit this foresight and initiative, who react more readily to new situations, and by their priority and resourcefulness dominate those situations are termed by Professor Giddings the "protarchy."

As an example of the economic advantage of the possessor of the relatively scarce factor, let us take an imaginary illustration in the building of a house. The only factors, it may be assumed, are land, labour, lumber, paint, and nails. The first four are plentiful and cheap, but nails are scarce and dear. But in the event of a great need for houses the price of nails may be many times as great as the cost of production, because nails, though a minor factor, are a complementary and limiting one. Under these conditions the manufacturer of nails would grow wealthy and powerful until the time when the scarcity is overcome and the price brought more in harmony with the sum-total of the producer's other outlays.

In attempting to correlate economic theory and industrial history we shall apply these familiar economic laws or standards to the varying factors of economic history. There will be an attempt to reorient economic history upon the law of supply and demand, and the law of the proportion of factors. There will be an effort to discover what is, at different times, the deficient or limiting factor in economic progress, the factors which are necessary or complementary to the situation, the new factors which are available for the formation of more efficient combinations, the political or social classes that supply these factors, and their economic and political rewards. The effort will be made to determine whether groups have risen because they supplied a relatively scarce factor, or declined

because the demand for their contribution had fallen off. And, finally, there will be an attempt to discover whether economic theory has tended to reflect or rationalize changes in the relative status of the different groups that supply the various factors.

CHAPTER II

THE POLITICAL BACKGROUND OF ECONOMIC THEORY

THE economic factors which played the chief rôle in the medieval period were land and labour.¹ Roscher gives three periods in the development of economy: the earliest, in which nature predominates; the second, in which labour is more important; and the third, in which capital gives tone to everything. In the period which furnishes the historic background for the rise of economic theory, the hunting and finding stage has been passed, and agriculture has become the occupation of major importance. History becomes in part the record of the struggles for land, or of the rise of trade and industry which make possible the accommodation of more people with a better mode of life under conditions of the same given quantity of geographical and physical resources.

As early as the "Barbarian" period of cultural history the pressure of population on land had done away with an earlier peaceful culture and brought about migrations and wars. Group prosperity required not only population and resources but the ruling and military power which could protect the group from the invasion of other tribes and maintain internal law and order. If economic prosperity is conditioned upon a number of factors, so that the removal or lack of any one of these factors reduces or destroys prosperity, then it would seem to be an economic factor. Among these is government. In fact, in the Middle Ages in Europe political stability or the attainment of law and order seems to have been the limiting or deficient factor in economic welfare.

The factor government, which in the early stages we may simplify by reference to its primary functions as law and

¹ Ashley, *An Introduction to Economic History and Theory*, vol. i, part ii, p. 393.

order, exerts a complex influence on economic prosperity. A local government is a condition of local trade. A centralized government is a condition of inter-regional trade. Commerce, or the exchange of goods over a wide area, is based on the establishment of law and order. A strong centralized government, then, which protects merchants and maintains uniform money and coinage, is a condition of the development of commerce and industry, and hence of the evolution away from the more primitive agricultural economy.

The breakdown of the Roman Empire left the countries of western Europe without adequate central government. The result was the feudal and manorial systems and the rise of local economy. There was not enough central government and protection of life and property, nor good enough roads to permit interchange of products between localities. The main effort of the Middle Ages seems to have been to regain and develop more and more centralized government. The need of security was so strongly felt that men were willing to surrender liberty in order to obtain this indispensable condition. (The classical English economists, the doughty exponents of *laissez-faire*, who opposed government intervention in business, were eloquent in praise of the necessary services of the government in the maintenance of law and order.) Thus Nassau Senior: "The government generally endeavours to extort from its subjects, not merely a fair compensation for its services, but all that force or terror can wring from them without injuring their powers of further production. . . . When we read of African and Asiatic tyrannies, where millions seem themselves to consider their own happiness as dust in the balance compared with the caprices of their despot, we are inclined to suppose the evils of misgovernment to be the worst to which man can be exposed. But they are trifles compared to those which are felt in the absence of government. . . . There is no tyranny which men will not eagerly embrace if anarchy is to be the alternate."¹

¹ Senior, *Political Economy*, p. 75.

✓ The class struggles of the Middle Ages appear to be incidents toward the development of centralized government. The struggles of the free cities against the landed nobility, the struggles between the king and the nobles, between the king and the city states, are stages in the rise of the national state and the development over a wide area of order and settled relationships and economic usages which made possible the rise of commerce, the division of labour, regional specialization of occupations, and the rise of industry. Autocratic government was the price which the peoples of France and England were at first compelled to pay for these advantages. In other words, the government in the early days through the ownership of land, and later through the contribution of law and order, became the owner or representative of the deficient or limiting factor in the social economic situation. As such it became the recipient of the economic surplus as well as of personal power. This is but the reflection in political life of the law of supply and demand in industry and the principle of valuation of factors under conditions of joint costs. The economic principle of value is the social principle of inducement and the political principle of power. And on this theory the honour and influence of King Alfred and of the able Norman, Plantagenet, and Tudor kings of England was a payment for value received. In both England and France the rise of nationalism and strong government was conditioned in considerable degree upon the personal force and ability of the monarchs. Under a weak monarch in the Middle Ages the nobles rose, and the realm was reduced to anarchy. Under the Tudors and the early Bourbons the ascendancy of the central government was established.

✓ But law and order has its locus not only in the character and personality of the ruler but in the behaviour pattern of the subject. Ultimately, of course, the settled habits of the people are the basis of good government. The king is the dramatic personality who in a turbulent age helps crystallize these economically indispensable habits. He may be even unconscious of his beneficent influence. He may be cruel,

proud, and unprincipled, merely seeking to surpass his rivals in his struggle for power; but if his violence and extravagance are less than the violence and extravagance of the rival nobles, and especially if his triumph means the widening of the market and the opening of the communications of trade, his rise to power is in harmony with the public welfare.

When, however, law and order have become established in the habit patterns of a people, or when other external symbols and agencies such as constitutions and parliaments have arisen, the demand for the services of a strong monarch may greatly decline. The reign of the Stuarts in England and the later Bourbons in France is an illustration of a time when order has become established to such a degree that the reign of a weak monarch does not result in anarchy. Unfortunately, history gives abundant examples of monarchs who made extravagant demands at the time when there was less need for their services. In the words of H. G. Wells, "History is full of the rise and fall of classes, priesthoods, dynasties, aristocracies. Each class as it comes up to predominance in the story sets itself to establish itself for ever; makes laws, constitutions, to fix its characteristics and defy all subsequent change. It rules, tyrannizes, loses vigour and flexibility." In more technical language, the owners or representatives of the scarcer or relatively backward factor try to institutionalize and perpetuate the advantage due to historic scarcity of their factor. And this attempt is furthered by the force of tradition and inertia. "Every important doctrine, from the very constitution of society and the human mind, acquires a certain momentum which prolongs its influence after it has ceased to be altogether suited to the circumstances."¹ Yet in time, after the need for a strong ruler had declined, when order had become institutionalized in common and statute law, government was no longer the limiting factor in the politico-economic situation; and the English development of constitutional limitation on the power of the monarchy and the French Revolution illustrate

¹ Ashley, *Economic History*, vol. i, part ii, p. 403.

the working in the political field of a principle analogous to the economic laws of value.

In this brief excursion it is not difficult to see that the economic principle of supply and demand and the economic principle of the best proportion of factors can be applied more widely than to purely economic situations. The limiting factor in the situation in the Middle Ages was in the first place and fundamentally law and order, for upon them were dependent the conditions that made possible the rise of commerce and industry. The classes that represented law and order were the lords of the manor, the clergy, the rulers of the free towns, the territorial princes, or the monarchs of the national states. Feudalism and autocratic monarchy represented the price that the general public paid for the expansion of the limiting factor. The lord, the priest, the guild master, the prince, and the king were the protarchs of those days. The decline of the power of the English monarchy and the French Revolution were an evidence that a certain amount of central government had been achieved so that the hereditary monarch had no longer a monopolistic control over the limiting factor in the economic situation, and so could not demand the extravagant rewards of his predecessors.

CHAPTER III

THE CANONIST DOCTRINE

In his chapter on the Canonist doctrine, W. J. Ashley observes, "The history of economic theory is too often regarded as a museum of intellectual odds and ends, where every opinion is labelled as either a surprising anticipation of the correct modern theory or as an instance of the extraordinary folly of the Dark Ages."¹ Another author contends that "no writer can altogether free himself from the characteristic influences of his age and country: nor is it desirable that he should do so. It follows that the theories of the past cannot be properly understood, or their validity fairly estimated, unless they are taken in connection with the actual phenomena that were at the time attracting attention, and helping to mould and colour men's views."²

(Neo-classical economists usually speak of three factors, instruments, or agents of production, and think of them as about equally important. Of these, medieval thinkers saw only two—land and labour.) According to the classification of factors adopted in this study there would be three factors of prominence in the Middle Ages—land, labour, and government. As was pointed out in the preceding chapter, there had been a considerable development of capitalism under the Roman Empire, capital being characteristically in the form of slaves. With the barbarian inroads and the breaking up of the Roman Empire in the west such forms of enterprise as might be called capitalistic disappeared for a time. Labour applied to land was the source of wealth. However, as emphasized above, law and order is a precondition of industry in any form; and during several centuries of political disturbance was, if the generali-

¹ Ashley, W. J., *Economic History*, vol. i, part ii, p. 381.

² Keynes, J. N., *The Scope and Method of Political Economy*, p. 276.

³ Ashley, *Economic History*, vol. i, part ii, p. 393.

zation is valid, the limiting factor, so that its possessors became the practical recipients of the economic surplus of the community. (Under this more primitive local economy there were lacking many of the conditions requisite for economic prosperity in the modern sense—strong central government, a wide market, money,⁽¹⁾ capital, division of labour, and the opportunity to enjoy the varied products of diverse regions.) The representatives of the limiting factor—law and order—fall into two classes, nobles and clergy, the one corresponding to the military and police power of modern times, the other to the modern forces of public opinion, education, and the law. Religious and quasi-religious groups obtained an enormous political influence in the Middle Ages, and played a leading rôle in medieval economic life. In the early Middle Ages the clergy constituted the one literate class in northern Europe. By the latter part of the fifteenth century they had developed what Ashley called “a complete and systematic economic doctrine—a body of teaching with interconnected parts, and touching every side of the economic life of the time. This doctrine was that of the Canon law.”

From this point on the Canonist doctrine may be subjected to some of the methods of analysis adopted for this study.¹ First, to what other disciplines or sciences is this economic theory indebted? The Canonist doctrine was based primarily on theology, or rather on that branch of it which is called Christian Ethics. This attempted to lay down certain principles of right and wrong in the economic sphere. The positive principle of the Canonist doctrine was the principle of just price. The negative aspect of this economic philosophy was the opposition to usury or the taking of interest.

Since economics is at least in part a study of man, the particular type of economic theory developed by a group will depend upon their fundamental assumptions with regard to human nature. Classical English economists usually assumed that man is guided by economic self-interest, that everyone

¹ See Chapter I and Appendix.

desires increase of wealth. Whether they really accepted this as a universally valid psychology, or whether, considering economics as the science of wealth, they abstracted from a realistic psychology and considered man in pursuit of wealth as the human subject of economic activity, according to the abstracting methods of other sciences, will be a subject for later examination. At least the implication was given that the pursuit of wealth was the dominant human interest. The other-worldly attitude of medieval theologians represented a different valuation. They condemned the pursuit of wealth as an end in itself. Avarice they considered one of the seven deadly sins; and by avarice they meant an eagerness for gain, beyond what was necessary to maintain a man in his rank in life.¹

What, then, was the place of economic activity in the Christian scheme? The answer to this question is involved with the medieval idea of status or class. Men had been placed by God in ranks or orders, each with its own work and appropriate mode of life. These various ranks involved special duties, and the distribution of wealth was looked upon as a return for the performance of the duty required of the class. This involved, of course, the assumption of an aristocratic and static social order. The success of the system for a time may have been due to the harmony between the religious ideals and the actual conditions of the time. As has been pointed out above, the necessity for establishing some form of law and order had reconciled men to an hierarchical scheme of society. The disappearance of trade and of the economic factors necessary to prosperity, the local agrarian economy, made the acquisition of wealth wellnigh impossible. Those engaged in handicraft were in this respect in the same class as the agriculturists. "The medieval craftsman was not trying to get rich, or as a usual thing, to break into another social class."² The

¹ Ashley, W. J., *Economic History*, vol. i, part ii, p. 388.

² Knight, Barnes, and Flügel, *Economic History of Europe in Modern Times*, p. 234 (London: George Allen & Unwin Ltd.).

religious ideal gave a measure of hope, dignity, and purpose to humble and routine life.

The conditions of the time explain the attitude toward such modern economic categories as money, capital, value, and competition. In the nearly independent local economy there was little exchange. The amount of capital goods required was small. The little manufacturing or commercial industry required but a scanty capital, which was furnished by the dealers and mechanics themselves. Agriculture was provided for by the advances of the lords and proprietors. Chief among the articles of foreign trade were wine, silks, sugar, jewels, and other luxuries. Before the thirteenth century the field for the investment of capital was very limited, so that money was borrowed only under circumstances of misfortune or special need. The small need for money and capital accounts for the slight importance attributed to these factors. ✓

Economic value was estimated according to the principle of just price, which was based on the common estimate of the cost of production. The duty of estimating just price usually devolved upon the presiding officer of the guild assisted by other guild or town officers. The elaboration of this notion of just price and its formulation in canon and civil law was one of the chief economic services of the clergy. Fluctuations in supply were taken into account as well as costs and dangers of transportation; and attempts were made to arrive at a fair price in view of all the economic conditions of the times.

If, as is often stated,¹ the medieval idea of just price is the equivalent of our modern notion of the cost of production, the medieval arbiters were attempting to do by price-fixing what the classical economists declared could be achieved under the conditions of free competition. Normal price in either case was supposed to equal the cost of production. But in the Middle Ages the mass of the people were politically powerless; and the force of moral right and social custom was exerted to

¹ Haney, S. H., *History of Economic Thought*, p. 76. Knight, Barnes, and Flügel, *Economic History of Europe*, p. 217.

protect the weak against the economic exploitation of the strong. In the case of many independent local units it is conceivable that monopoly of a local market could be more easily secured. There was no potential competition because of the lack of trade and transportation. The evils of a monopoly price could be escaped only by an appeal to a higher political or spiritual power. Also, the limited market was not sufficient to stabilize prices. In the words of Von Wieser, "Where commodities come forward in great quantities and have a large sale the degrees of difference between the equivalents of various buyers are not great."¹ In other words, in a modern market where there is a large confluence of buyers and sellers, so that, for example, in one day there may be one thousand buyers and nine hundred and ninety-nine sellers, and the following day nine hundred and ninety-nine buyers and one thousand sellers, the fluctuation of price around the "normal" or average price will be small. And the "normal" price may be the equivalent of the "cost of production." But in a small market where the main industry is agriculture, and that largely for subsistence, there may be great relative variations from day to day in the number of buyers and sellers. If on one day there were ten buyers and fifteen sellers, and on another fifteen buyers and ten sellers, and there were no moral or legal restraint to prevent either side from taking full advantage of the situation, there might be great deviations from the "normal" selling price. Under these conditions the enforcement by the clergy or the guild masters of the just price would be the "artificial" attainment of the very same end that could be reached under different conditions by means of free competition. ✓

Just price, then, was the economic principle underlying the public ^{local} regulation of potential industrial monopolies. The clergy and the guild masters corresponded to our modern public regulating commissions. This regulation was necessary because of the tendency toward monopoly. Monopoly was easily realized through the operation of the craft guilds because of the limited

¹ Von Wieser, *Natural Value*, p. 43.

extent of the market. Local monopoly was possible owing to the slight amount of the territorial division of labour, when each town produced chiefly for itself and for the surrounding country. The absence of competition and the money economy, which later made possible for a time an economic system that was automatically self-adjusting, made regulation inevitable. In later times the presence of many buyers and sellers, and the wider use of the money medium of exchange, made possible an automatic attainment of the equivalent of the medieval just price. Competitive conditions are supposed to be such that both buyer and seller enjoy an approximate equality of benefit from a purchase and sale. Take for illustration the sale of a horse. There are present one buyer and one seller. The buyer would pay as high as one hundred dollars. The owner would sell for as little as fifty. What will be the price of the horse? Under free competition and a wide market with a large number of both buyers and sellers it is presumed that the price will be in the neighbourhood of seventy-five dollars. That is, there will be a seller's surplus of twenty-five dollars and a buyer's surplus of twenty-five dollars, so that there is a practical equivalence of utility gained from the exchange by both buyer and seller. The attainment of this through the principle of an unvarying just price was the aim of the medieval mode of regulation. Without regulation, differences of shrewdness and personality might have given one bargainer a disproportional advantage in the exchange. Thus social control or guidance was the medieval substitute under the conditions of local monopoly for the modern competitive money economy.

Also, as Knight has pointed out,¹ the local economy and small-scale production necessitated a certain amount of reliance upon moral qualities in the producers. "In the absence of large-scale production, grading and sales by sample, quality could be assured only by insisting on certain moral qualities in the producers. The system of apprenticeship looked after this on the constructive side; guild supervision made sure that

¹ Knight, Barnes, and Flügel, *Economic History of Europe*, p. 223.

it had been achieved by checking up the actual work and the product." At the present time this standardization in some lines is attained through the machine or mass-production method.

There is another sense in which the local economy is involved with an emphasis on ethical considerations. Under conditions of face-to-face relationships and personal acquaintance between buyer and seller it is evident that the sense of responsibility for the qualities of one's product may be more easily developed. This is especially true under conditions of subsistence or local industry where the producers consumed a large proportion of their own product. The peasant and craftsman had an idea of quality. They had a personal interest in the excellence of their goods. The articles were expressions of the individuality of the craftsman or maker; and as consumer he had a personal subjective interest in the quality of the product. In other words, the medieval economic theory emphasized consumption; so that we may assume provisionally that economics based on consumption may involve a harmony between economics and ethics. Ashley¹ has pointed out that value in use is the universal method of valuation under a "natural economy." "The conception of exchange value is a secondary and historical one; not a 'logical antithesis' to value-in-use; not a subdivision of the conception 'value' equal in inevitableness to value-in-use."

In the course of time the conditions which made the Canonist doctrine a suitable economic policy, that is, one which worked on the whole for the general social interest, began to pass away. This paternalistic regulation was suitable for a static and aristocratic society. When the chief economic factors, excluding government, were land and labour, and the chief economic classes were peasants and craftsmen, when for the great mass of men the quest of gain would have been devotion to futility, when the chief source of human dignity lay in man's hopes for the future life, when the priest was most influential in establishing the current habit patterns of thought and accepted

¹ Ashley, *Economic History*, vol. i, part ii, p. 395

judgments of value, the Canonist doctrine was a practical regulatory conception. However, if the generalization in an early chapter is sound, there was throughout the Middle Ages a trend, slow at first but increasing, toward conditions that make for economic prosperity in the modern sense. With the growth of political integration there was a gradual increase in trade, especially in the later Middle Ages. The growth of trade, the development of the money economy, the rise of regional specialization, and the expansion of wants as a result of the economic improvements brought into existence a new economic class. This class was the merchant. His quest was not merely subsistence or the necessities for the maintenance of a traditional class standard, but the pursuit of gain. The rise of the merchant class was synchronous with the development of the capitalistic spirit. According to Sombart,¹ the essence of this new attitude was a desire for gain and a capacity for calculation. The rise of the merchants tended to do away with the static conditions under which regulatory rules could be enforced. Here was a new group for whose services there were no traditional standards of fair return. The merchant was entitled, according to the Canonist theory, to the wages of his labour as transporter and payments sufficient to cover risks. But the item of risk was difficult to assess. According to Ashley, foreign trade did more than any other force to break down the medieval social order. With the rise of the merchant class there are new factors injected into the economic system. In addition to land and labour there is a rise of the factors of trade and exchange, regional specialization, and the rise of the division of labour. Men of foresight and ambition received an inspiration of opportunity in the economic sphere. The static equilibrium was overthrown and dynamic conditions gradually developed. In place of the static, small-scale, local, subsistence, quality, economy, which was kept in order by paternalistic class regulation, there developed with the expansion of the market, the rise of the money economy, and the division of labour,

¹ Sombart, M., *The Quintessence of Capitalism*, p. 153.

phasis upon quantity measured in pecuniary terms. / combination of factors was on the make; and the actor, regional or foreign trade, became the limiting factor in the new economic system. The owners or representatives of this limiting factor in the system which was developing became the protarchs of the new age. And the economic theory which rationalized the new system took its name from the dominant economic class, and is called mercantilism.

The number and relative importance of economic factors at a given time may also account for the negative aspects of the Canonist doctrine—the opposition to usury. In the early Middle Ages, when land and labour were the chief economic factors, when there existed a small-scale local economy, there was little need for money or capital. Loans were contracted, not to the end of profitable employment in industry, but for consumption purposes. In the language of modern banking, they were non-self-liquidating loans. They were contracted generally to satisfy some urgent want or personal extravagance. The effect of the loan, then, was to injure the economic status of the borrower, or to put him within the power of the lender. The original purpose of the anti-usury laws was to protect the poor and improvident against the rich and shrewd, or to maintain the traditional equality within each social class. As trade and transportation developed, as inventions began to arise, and the need for capital became evident, there was a gradual modification or relaxation of the laws against usury. Sombart believes that the schoolmen sympathized with the expansion of economic life in their age and country.¹ He maintained that the schoolmen praised economy as distinct from prodigality; that their opposition to interest without risk, and their allowance of payments for money which was invested in commercial or industrial cases where the lender shared the risk, was an honest business and discourage people from living at interest of their capital. That is, according to Sombart, *The Quintessence of Capitalism*, p. 247.

Sombart, the Canon law concerning usury might be : up under the precept, "Don't prevent money from be capital." However this may be, as commerce, industr invention developed, as loans were contracted increasingly for productive purposes, the opposition to the taking of interest declined.

These new conditions were such that price regulation also became increasingly difficult. Price regulation was easy as long as the variety of goods remained small, and uniformity of products could be maintained. But with the rise of inventions, innovations, and trade there took place a relaxation of price control owing to the impossibility of keeping track of many articles of various grades which were produced under different conditions and often consumed far away from their places of origin. Thus the rise of new factors and the attempt to achieve a better proportion among them were the conditions which made the Canonist doctrine obsolete as a workable social policy.

It is evident that the method used in the foregoing analysis, the conception of the historic relativity of economic doctrines, presupposes a certain philosophy of history. The economic factors of the economist are identified with the classes and class conflicts of the historian. And there is an attempt to explain history by reference to the economic laws of value, primarily the law of supply and demand and the law of the proportion of factors. Different combinations of economic factors, such as law and order, regulation of industry, and trade and transportation account for the rise and dominance of economic classes. Each class in the early stages of its emergence, like the entrepreneurs in a new industry, represents the dominance of demand over supply. With the catching up of supply to demand or the injection of a new factor into the economic situation, a new proportion of factors is required, and the representatives of this new and limiting the dominant economic, and generally the do class of the age.

CHAPTER V

PHYSIOCRACY

BEFORE taking up an analysis of physiocracy, it may be desirable to recapitulate the trends and review the theories arising out of the study of earlier industrial history and earlier economic generalizations. "Economic theory appears to emerge out of conflicts of class interest as generalizations or theorizing of the policy of different economic classes. Canonist doctrine was the economic theorizing of the medieval clergy. Cameralism was the system of rules and generalizations made for and in the interest of the German territorial princes. Mercantilism, although not exactly an economic system, was a body of doctrines and beliefs arising out of a community of interest between the mercantile class and the absolute monarchy. Under certain historic circumstances it appears that the class interest of a certain group is in harmony with the general welfare of the nation or people concerned. This is true when the services rendered by the class are essential to the welfare of the collectivity, are scarce relatively to the needs, and are within the economic potentialities of the times. The economic class may be envisaged as representing what are, more abstractly considered, economic factors. And the conflict of classes may therefore be viewed as working out according to the economic laws of value. The utility of the services of a class and the scarcity of those services are a general measure of the value of these class services, and the general estimate of the value of the services furnish a long-time index of the economic and political power of the class.

According to this theory, the loyalty won by the absolute monarchy was economically justified by the policy of the kings of promoting law and order, removing the hindrances to the free exchange of goods within a country, encouraging the accumulation of money and the development of the pecu-

niary system, and fostering trade and transportation. These factors were all at certain periods relatively scarce or deficient factors, so that the expansion of them, as of any factor which is deficient in relation to the ideal proportion, or the economic potentialities of the time, was in harmony with the general welfare. Hence the power of the monarchy and the prosperity of the merchants; and the historic justification of mercantilism as the rationalizations of the policy of classes which were making valuable contributions to progress. The rise of these classes meant the corresponding subsidence of the guilds, the clergy, and the landed nobility.

In the latter part of the seventeenth and the first half of the eighteenth centuries the enterprising element of the middle class turned increasingly in England to land ownership and more efficient agriculture. The community of interest between the king and the progressive bourgeoisie was broken. Agriculture became for a time a dynamic branch of industry. At the same time the activities with which the monarchy was identified had probably reached their normal proportionality. And agricultural improvement became for a time the most effective means to increase of wealth and population. The Houses of Parliament became the political organ of the rising class. With these economic factors go certain personal factors in the case of the monarchs and their ministers, so that the absolute monarchy in England was succeeded by a constitutional government.

In England no new economic theory developed out of the decline of monarchy and the rise of capitalist farming. Yet such a theory arose out of a parallel movement in France, where it became known as physiocracy. This might in its essence be characterized as a theorizing or rationalization of the Agricultural Revolution as mercantilism was a rationalization of the Commercial Revolution.

Before analysing physiocracy as a type of economic theory it may be desirable to review the political background of the previous one hundred years in France as a basis for the

understanding of the transition from mercantilistic to physiocratic ideas.

The generalization that absolute monarchy flourished because of its social contribution must be stated here with modification or it may be formulated negatively. The monarchy eventually fell with a crash because, in the words of Mirabeau, "the kings were not worth what they cost." From the point of view of mercantilism the French kings did not compare in efficiency with the English kings. And the decline of the French monarchy, as exemplified by the latter part of the reign of Louis XIV and the reigns of Louis XV and XVI, represented a lag in political adjustment in comparison with the parallel movement in England. Apparently the rise of the monarchy in France did not curb the rapacity of other dominating classes as much as in England. By the time of Louis XIV the king had completely tamed the once arrogant French nobility, but he did not effectively protect the people from them. Yet Sée¹ holds that the success of the French monarchy in getting the upper hand of the nobility did work out in the long run in the interests of the peasant proprietor. The new landed aristocracy in England on rising to power had almost eliminated peasant ownership, and developed a more efficient agriculture on the basis of larger units. But in France the manorial system existed up to the Revolution. And the Crown opposed excessive encroachments on the part of the nobles. Sée states that "the French peasants, during the last two centuries of the *ancien régime*, seem to have been more favoured than their convergers in the rest of Europe, for to a large extent they were personally free and owned their land. When the Revolution had done away with the excessive burdens on the peasants, peasant ownership became completely autonomous, so that France has even to our own day remained a type of rural democracy. Sée asserts that the opposition of the nobles to the royal government was one of the forces that initiated the Revolution. The nobles

¹ Sée, Henri, *Economic and Social Conditions in France during the Eighteenth Century*, Introduction, xvi, p. 14.

combated what they style the despotism and tyranny of the royal agents because they felt that their privileges were endangered. "As a result of the edicts of May, 1788, against the Parliaments, the nobility gave the signal for the revolutionary agitation which was destined soon to turn against them."¹ Yet during the period before the Revolution tax farmers, nobles, clergy, and king all preyed upon the common people. It is true that early in the reign of Louis XIV the able mercantilist minister, Colbert, developed French manufacture as a basis of foreign trade. The commodities manufactured, however, were mainly luxuries, articles of elegance—cloth, tapestries, and silks, glass, porcelain, laces, and ironwork. He was not so successful, however, in promoting domestic trade. The tolls were lightened but not abolished. Within the kingdom each French province was almost independent economically. It had its own customs barriers, and special weights and measures. Thus foreign trade was based on articles of luxury; domestic trade was based on agriculture, on the production of food and raw materials. The success of the mercantilist policy did not promote the growth of population and the welfare of the mass of the people. Although Louis XIV shared the nationalistic ambitions of his great minister, his senseless policy more than offset the achievements of Colbert. Extravagance at home, costly campaigns abroad, piled up at the time of his death a national debt the interest on which was greater than the annual revenue of the government. The French Protestants, including many of the most valuable artisans of France, were driven to emigrate in vast numbers because of the revocation of the Edict of Nantes. Population from 1660 to 1715 is estimated to have declined four million, or 20 per cent, and agricultural products to have fallen off by one-third. The peasants and tenant farmers were subjected to a vicious financial system—the land taxes were said to have been 80 per cent of the farm income on mediocre lands.² The peasants were forced to labour

¹ Sée, *Economic and Social Conditions in France*, pp. 107, 108.

² *Ibid.*, p. 28.

on the roads, to pay tithes to the clergy, and fees to the feudal lords. Agriculture, for which France was peculiarly adapted because of her favourable climate and fertile soil, was being stifled. This in brief was the political and economic background of the rise of physiocracy. The things for which the English monarchy, especially the Tudors, had won the loyalty of the English people—the reduction of disorder, the development of commerce, the accumulation of capital, and the fostering of a money economy—were not accomplished to anywhere the same extent under the rule of the French kings. The principle of checks and balances among economic classes which enabled the middle class in England to gain in wealth and power relative to nobles and clergy was not working in France. The result was the eventual collapse of the absolute monarchy.

In one sense the history of the later Bourbons illustrates the thesis that a social class earns its distinction by its contribution to progress; but it illustrates it negatively. In the origin of society the kingly office may have been of more utility than the cost of supporting it to the subjects. But if Mirabeau's remorseless test, "Are you worth what you cost?" had been applied without historic lag, the monarchy would have ended with the reign of Louis XIV. Yet such a consummation would have implied a rationalism, an economic motivation like that assumed in the philosophy of the physiocrats. As a matter of fact, the lag of the better part of a century before the fall of the monarchy involved habits, fictions, and emotions that are foreign to the nature of the economic man. The monarchy as the symbol of the nation represented a collective or group glory. It took defeat on land and sea, the loss of Canada and India, financial bankruptcy, hatred of England, and the corresponding sympathy for Americans, the lack of regal dignity on the part of Louis XV and Louis XVI, and personally unpopular ministers—all these had to be added to the inefficiency and extravagance of the monarchy to bring about its downfall. Yet if one wished to force the economic interpretation, one might assert that the whirlwind of the Revolu-

tion was the product of the lag of political adjustment to changed economic conditions.

Such, in brief, is the political history back of the rise of the physiocratic doctrine. Why did no such doctrine develop in England, where the Agricultural Revolution attained great magnitude? Henry Higgs states that "in countries like England and Holland the theory was too sharply in contrast with the facts of commercial activity to find a favourable soil."¹ In England wealth had been gained in commerce, and then had been used to develop capitalistic agriculture.

In discussing the main ideas of physiocracy, an attempt will be made to distinguish rational or scientific elements in the doctrine from others that may be held to lack economic or historic reality. In distinguishing the realities from the fictions it may be expedient to start from some practical proposals made by the physiocrats and other reformers. These included a foreign policy of peace rather than war, free trade, both foreign and domestic, reduction of court luxury and extravagance, abolition of class privileges and exemption from taxation, reduction of land taxes to one-third of the net income, the promotion of scientific agriculture, the organization of large farms, and improvement in transportation. It is obvious that these practical suggestions may be condensed into the single formula—promote agriculture.

The solid core of the situation seems to be that agriculture at the time was in arrears in comparison with government, commerce, manufacture, and the luxury industries that catered to the aristocracy. It was the backward, the deficient, the limiting factor in the total economic situation—that is, backward with reference to what was possible at the time.

The especial importance of a sound agrarian policy in France was due to several facts. Agriculture in France was not like that in England, a branch co-ordinate with commerce and industry. It was the most important branch of industry. In England, agriculture became of special importance in the

¹ Higgs, Henry, *The Physiocrats*.

seventeenth and eighteenth centuries because of the possibilities of increased production from larger units and more scientific methods. But in France agriculture was the main industry, and it had not progressed. Agriculture became the limiting factor in the economic situation because of its importance, and its stagnation when more progressive methods had been successfully applied elsewhere.¹ According to Sée, "few large parcels, a predominance of exploitation on a small scale, and cultivation in the hands of poor peasants—these were some of the conditions that militate against the progress of agriculture." Again, "Carelessness on the part of the great proprietors, the indolence of the peasants, who were discouraged by the overwhelming taxes, insufficiency of the ways of communication, and particularly of the main highways, in addition to obstacles placed in the path of the trade in agricultural commodities and in the path of free cultivation—all these explain the slow development of agriculture."¹ In writing further of the overwhelming importance of the peasant question, Sée states that "the peasant question was bound to be of importance in a country in which the rural population was numerically so important, where industry on a large scale was only in its infancy, and where agricultural production was more important than all other branches." (Thus it seems natural that physiocracy should arise in France, for physiocracy was a system of economic philosophy centring around agriculture. It was a rationalization of a useful agrarian policy.

The phrase "rationalization of a policy" suggests that the economic theory in question has both scientific and unscientific factors. And this statement is of sufficient importance to be elaborated to some extent. The scientific factor, it may be assumed, is that which is based on the economic realities of the historic situation and the historic movement. The economic realities are well reflected in the sensible policies enumerated above. The factors which, for want of a better term, may be called the unscientific elements, comprise the philosophic

¹ Sée, *Economic and Social Conditions in France*, pp. 29-31.

generalizations, the psychic efflorescence, which accompany the new movements and the development of the new policy, and which are not a necessary part of it. Among these are so-called first principles, fictions, rationalizations, over-corrections. All this means that the policy in question is advocated and defended by reference to more honorific standards than that of mere human utility.

One way to defend a new policy of observed advantage is to react against all the assumptions and first principles of the policy that is to be replaced. Mercantilism was the theory of the king with his administrators and office-holders, and of merchants and tradesmen, and of the upper middle class, the "high bourgeoisie," the lawyers and financiers who were identified with these interests. Physiocracy was the doctrine of the French reformers who wished to dignify and stimulate the farmer and the agrarian enterpriser. A contrast of the various ideals of these conflicting theories is given below:

<i>Mercantilism</i>	<i>Physiocracy</i>
Urban	Rural
Nationalistic	Cosmopolitan
Centralization	Decentralization
Import Duties	Free Trade
Government regulation	<i>Laissez-faire</i> ¹
Divine right of kings	Natural rights
Money most desirable form of wealth	Economic value in consumable goods
Revenue best obtainable from indirect taxes	Revenue best obtainable from direct taxes
Assumption of productive character of government and commerce	Personal services, trade and industry sterile; agriculture alone held to have a net product.

The fact that the clergy and the nobles were exploiting the peasants as well as the king and the higher bourgeoisie may

¹ The *laissez-faire* attitude of the physiocrats is not to be understood as hostility to government, but with reference to commerce and trade. They believed in the removal of restriction on trade both domestic and foreign. They were free traders rather than opponents to paternalistic government. They had a preference for a type of patriarchal monarchy, like the Chinese, on the ground that the interests of the monarch would be identical with those of the agricultural classes.

motivate some of the extreme views of the physiocrats. While their internationalism, free trade, and valuation of goods over money may represent the reaction against the policies of the king, their doctrine of natural right may be a correction to all the royal, seigniorial, and clerical inherited and historic rights. This concept of the net product of the agriculturist was a contrast to the idealization of foreign trade by the merchants, and their identification of wealth with material objects may be a rationalization of their protest against the excessive prices paid for the services of priests, lawyers, and governors, whose contributions are immaterial. Finally, the economic man, who was motivated chiefly by the desire to better his own economic self-interest, was borrowed from the rationalistic conception of the philosophy of the enlightenment; and may be conceived as a reaction against the ideals of the man of power or the hereditary aristocrat who sought honour, distinction, and glory, and who exhibited little economic prudence or calculation.

The place of this unscientific factor in economic systems may be more clearly apprehended through an analysis of the philosophy of nationalism. Those who support the doctrine of nationalism accept some version of the theory of the super-state. The separate persons in a political jurisdiction are looked upon, in the words of Spann,¹ "as members of a national economic corporation which forms, to a degree, a unity or totality." Hence the mercantilist conception of the balance of trade. This balance of trade does not belong to the separate economic agents, the persons doing business with each other; their balances must not be conceived as "private balances"; the balance must be looked upon as an aggregate belonging to the economic unity of the state. The individualists of the classical school, on the contrary, looked upon the economic intercourse between nations as but the aggregate of the movements of many individual economies whose relations were regulated automatically by changes of international prices,

¹ Spann, O., *The History of Economics*, p. 49.

just as the conditions of supply and demand regulate the economic relations of men who are fellow-citizens. Hence it makes no difference whether two persons who do business with each other belong to the same or to different nations; as if one resided in New York and the other in Chicago, or one in New York and the other in Montreal. Philosophically, this division of opinion is similar to the medieval distinction between realism and nominalism. The realist held that universals were real; the nominalist held that separate objects and persons were real, and that universals were only names. The real problem, it seems to the writer, concerns the nature of the higher unity. Is it a mechanical or a vital unity? Is a corporation an organism, a vital unity, or is it only an aggregate or an organization? German economists imply or suggest the idea of a metaphysical, vital unity. Yet this appears to most English and Americans as a fiction rather than a reality, an error, but historically a useful one to the king or his ministers, a theory which would be useful as an instrument of control, which is therefore asserted to be true. It is then established by propaganda and perpetuated by force of the persistency of ideas established in childhood.

If the nation is a reality, then so the territory must formerly have been, and before that the town. In fact, Gustav Schmoller asserts that "the town was a privileged, self-conscious community."¹ But where did the self-consciousness reside, in the communal over-soul, or in the consciousness of the separate persons who were citizens? If consciousness is a function of separate biological organisms, the community existed as a segment or interest in the minds of the separate persons. State sentiment seems a common mode of feeling of particular persons living within a conventional area; and state rights a derivation of this common feeling. Otherwise why not consider the township as a self-conscious entity and township rights as the self-assertion of a supreme individual spirit? When Texas entered the American Union, a privileged self-conscious entity

¹ Schmoller, Gustav, *The Mercantile System*, p. 7.

expired, but no one knew just when, for the unity was not a biological one; and if a metaphysical heart ceased to beat, no specific, human Texan was aware of the fact.

Professor Allport, in his article "The Psychology of Nationalism," in *Harper's*, August, 1927, attacks the popular assumption that the nation is an "over person" capable of feeling and willing, a great genius or spirit, to be apostrophized, honoured, loved, and protected. The nation is not some mystical force which settles over men and shapes and controls their attitudes. This conception Allport calls the "nationalistic fallacy." It exists because the elementary feelings, emotions, and attitudes which have been developed within the family circle can be transferred to the sight or sound of nationalistic symbols. Nationalism, then, becomes a method of control by people in power through the means which psychologists call the conditioned reflex. Allport contrasts the popular and scientific conceptions of the nation. "The former accepts uncritically a reality projected behind our national symbols and conveyed to us in the language of the metaphor. The Nation is a great Being in which the destinies of individuals are merged and for the sake of which individual interests must be sacrificed." Scientific analysis, on the other hand, formulates the nation as existing solely in the behaviour of its individuals. There are fairly clear reasons why the popular view has taken a stronger psychological hold than the scientific; first, because it carries the force of emotional habits conditioned early in childhood by the use of symbols; second, because it affords a socially approved method, raising an individual's estimate of himself; and third, because it is an unrecognized manner of obtaining, under the guise of patriotism, certain special privileges."

The doctrine of the divine right of kings was another metaphysical notion which accompanied the rise of the absolute monarchy. If the monarch could secure the acceptance of this doctrine by means of the propaganda under his control, he could help establish his position by means of an alliance with traditional religious beliefs and customs.

Another notion of the same class was the doctrine of sovereignty, a metaphysical notion which was used to bolster up the power of the dominant class of the time. In the Middle Ages a metaphysical basis for a religious paternalism, with the rise of modern monarchy it became a prescription of secular absolutism. With the progressive limitation of the monarch's power it necessitated constant reinterpretation. The people, the state, the common will became sovereigns. From the point of view of economic analysis it may be merely a metaphysical parallel to the fact that the social group whose services have the greatest relative utility and scarcity for the nonce will gain the greatest economic and eventually the greatest political power. Notions like these which rationalize the rise of certain groups to dominance were largely the subjective and non-scientific factors in progressive historic movements. The metaphysical cameralist or the opportunist political philosopher for the king was a sort of sublimated lobbyist for the medieval power trust in the Congress universal of the spirit.

The physiocrats in initiating a movement against the policies of the mercantilists quite naturally adopted metaphysical notions contrary to those of the latter. In place of nationalism they adopted internationalism, which is simply the denial of the nationalistic fallacy. But they also positively created metaphysical sanctions as justification for their own policies.

In opposition to the dominance of the state or the king (the physiocrats themselves did not oppose the absolutism of the king as a representative of law and order. That was not done until the rise of legislative assemblies gave guarantee of security), the physiocrats postulated the individual. And their theorizing became individualism. Historically this movement came to denote or connote a number of different things. The term was used to designate movements which sought to secure a greater amount of personal initiative, a greater play of personal desires and satisfactions, in contrast to centralized control and limited class privileges. It also was used as a synonym of liberalism. And that had several meanings. Politically it meant the partici-

pation of greater numbers in the conduct of public affairs, such as the extension of the right of voting. Socially and ethically it meant a new personal valuation. In the Middle Ages and the era of the absolute monarchy, only certain people were held to count socially, to possess "intrinsic" value. They were the ones who inherited caste, and owned property, and performed services (instead of creating material commodities), and appropriated nearly all of the revenue above what was necessary for the subsistence of the underlying population, and enjoyed the luxurious consumption that was possible at the time. In other words, they were the personal realities, the ends of the economic process; the members of the lower, unprivileged classes were merely the means. Individualism as a reaction against feudal aristocracy was a philosophic sanction for the demands of many others for admission to the charmed circle of privilege, or for the dignity as ends instead of merely means, for the right of participating in the enjoyment of the economic surplus, the responsibilities of public affairs, and the benefits of wider social relationships.

What is the nature of the individual as postulated by the philosophers of the enlightenment? One notion, which has been called psychological atomism, conceives human beings as ultimate independent units. This is a metaphysical notion devolving from the medieval idea of the soul. This atomic psychology seems to the writer a fiction or metaphysical projection parallel to the nationalism of the absolute monarchs and their satellites. Historically, individualism was a philosophy arising out of the struggle for liberation from oppression and tradition, from control by kings and priests. Since, according to the modern psychology of rationalizing, men will postulate certain first principles from which, by a process of logic, they can deduce the duty or necessity of what they want to do, so, since authority was on the side of the older institutional order, men postulated an inalienable sacred authority in the protesting individuals. Then it was a short step to the conclusion that the sole function of government was to protect

individuals in the rights which were theirs by nature. As Dewey has pointed out,¹ there was no logical necessity in appealing to the individual as an independent and isolated being. One could have asserted that some primary groupings had claims on which the state should not encroach. But the state was bound up in tradition with other obnoxious forms of association, ecclesiastical and economic, such as guilds and corporations and church-controlled education and science. By a fiction that the individual was an independent and self-justifying entity, apart from association, men justified revolt from church, monarchy, and old habits and customs that hindered the rise of new industrial classes and the adoption of new technological means, more effective devices for satisfying the old and new wants.

This rationalization of the transition from feudalism and medievalism to modern industrialism is reflected in the ethical doctrine of natural rights, the psychology of the English school of hedonists, and the English philosophy from Locke to Hume. Thus philosophy, ethics, psychology, and political science were parallel developments of the effort of man to readjust himself to the new environment based on science, discovery, and the rise of manufacture and exchange. This emancipation from the legal and social regulations that were obstacles to the new economic agencies might have been defended and facilitated by the kind of social science and psychology that have been developed in the twentieth century, but the historic condition evoked non-realistic crystallizations created to justify the emergency. Rationalization is an easier way out than scientific or problem-solving analysis.

What, then, is the nature of the individual, if he is not an independent and self-justifying entity? Dewey states that the notion of an individual includes the idea of spatial separateness, and autonomy of motion expressing desire, intent, and resolution. Yet we can hardly go on to treat this personal entity as

¹ Dewey, John, *The Public and Its Problems* (London: George Allen & Unwin Ltd.).

unrelated and unconditioned. And this conditioning begins before the individual has acquired self-will and autonomy of motion. He is born into a social milieu, a family and other groups; and he acquires habits by the conditioning of his social and material surroundings. The life of a particular person exists in his relationships. These different classes of relationships comprise interests or what some psychologists describe as personality segments. Thus we have an economic interest, a political interest, a social interest, an educational interest, a recreational interest, etc. An interest group means a number of particular persons who are giving expression at the time to one of these particular interests. To abstract a personality segment from one person and combine with a like segment of many other persons, and to treat the resulting abstraction as a separate entity or reality is exposing oneself to the danger of making another fallacy similar to the nationalistic fallacy. These abstracted interests or personality segments do not have a basis in a biological organism. They do not constitute a personality, but an abstraction. Dewey's conception of the public might, if taken uncritically, become another metaphysical notion.

This conception of the nature of an individual may be stated in other words. The atomic attitude could be justified by the separate physiological existence of each person, the fact that his conscious life is conditioned on a biological organism. His actual conscious life is realized in relation to physical environment and to other persons. These various relations give rise to associations which grow up around specific interests or individual "personality segments." In organizing these interests or activities it becomes necessary for some individuals to devote themselves professionally to promoting the interests of the organization, or of all the persons who spend part of their time and energy in this field of activity. The tendency, then, is for these leaders to use their rationalizing and myth-making faculties in inventing higher sanctions for what they want to do. The result is abstraction and personifi-

cation of group interests, the fallacy that the group is a kind of psychic unity, and the corresponding assertion that an interest or an association has a right. This would be the same as the assertion that a personality segment has a right; and is akin to what Professor Allport designates as the institutional fallacy. The biological atomist would say that rights are the demands of biological organisms, that interests do not have rights, but people do. And that Dewey's corrections of historic individualism in holding that each primary group should have claims on which other groups should not be allowed to encroach—i.e. the state on education, the church on the state, etc.—might be amended further to the formula that particular persons should be free to determine the relative value to them of various interests, and should be protected from the threatened domination of other forceful and egoistic individualities, especially when they add to their domineering drive the force of the institutional fallacy.

The physiocrats also pressed into the service of their programme the natural rights philosophy, which furnished a basis for their individualism. Professor Haines¹ has shown that the conception of the natural order, natural law or natural right is a concept so vague and variable that it can be used as a sanction for almost any debatable programme. From the Greek philosophers down to the Supreme Court of the United States the term has gone through great varieties of denotation—nature in the physical sense, the divine order, religious doctrine, principles of divine origin, rules to guide the conscience of an unlimited political sovereign, the customary rules of common law, conceptions of reasonable and just and non-confiscatory as sanctions for judicial review by courts over legislation, and as sanctions for limiting legislative and administrative agencies in regulating public utilities and fixing rates. The natural order has successively meant the conclusions or beliefs of the Greek philosophers, the church fathers, the barons opposing the tyranny of the king, the political philosopher

¹ Haines, C. G., *The Revival of Natural Law Concepts*.

for the absolute monarch, the agricultural reformers in France, the protagonists of the French and American Revolutions, the social philosophers of the industrial revolution, and the leaders of American political and legal conservatism. The term has been found adjustable to the concepts of physical science, theology, absolutist political theory, liberal political theory, revolutionary doctrine, and conservative political and economic views.¹

From this point of view the doctrine of natural right can hardly be considered a very urgent sanction for anything. If one wishes to stress the distinction between pure and applied science, the natural right theory would be classified as applied science with the application antedating the law. The writer does not wish to imply that the natural law concept is not a highly useful theory. In fact, in the case of the physiocrats, as explained above, it was pressed into the service of an excellent political and economic programme. But the point we would suggest is that this policy was justifiable on the basis of matters of fact and did not require any such vague metaphysical support. Logically, the theory of natural right enabled the physiocrats to integrate their economic policy with politics, science, philosophy, and religion. The eighteenth-century God created nature; nature brought the concept of natural laws; the reason of man enabled him to discover this divine order in nature, and was the ground of his optimism and faith in progress. Thus religion, rationalism, and ethics were conceived as in harmony; and from these sources of unquestioned authority certain natural rights were deduced by process of reason or from the postulated state of man before the existence of society. These natural rights of the individual included the property of his own person or the right to labour, the right to pursue his own economic self-interest, the right to own property which the individual had made by applying his own labour to the raw materials furnished by nature, and

¹ For a specific illustration Ashley states that "primogeniture is accepted by the whole nobility, the squires of England, the lairds of Scotland, and the Irish gentry of every degree, as almost a fundamental law of nature" (*Economic Organization of England*, p. 127).

the right to own landed property. By this conception of natural law, men were able to integrate their policy of promoting agriculture, and advocate a *laissez-faire*, free-trade cosmopolitanism. Because of the royal opposition to this policy in France, the natural-right philosophy was easily transformed into a radical revolutionary doctrine. >

An atomic individualist who starts from the conception of the biological organism as the unit, and the conditioned reflex as the method, could accept a natural philosophy based on primary biological needs, upon instincts or prepotent responses, and an equality of political and economic rights based on an equality of biological potentiality, and of plasticity in childhood, of equal susceptibility to conditioning. Also, the historical realist might assert that the term "natural" was a convenient term to apply to the working out of the laws of economic value in history, adopting a policy of fostering the limiting but expansible factor, of producing what is relatively scarce with reference to the current demand. But this would be merely adopting the method which the writer is criticizing, and seeking metaphysical sanction for that which is justifiable in itself.

A third concept developed by the physiocrats parallel to that of individualism and natural right was the psychological notion of self-interest as the dominant motive. Since the physiocrats propounded before Bentham the principle of enlightened self-interest, which later became known as the doctrine of the economic man, it is desirable to consider that subject at this point. →

The type, economic man, Werner Sombart identifies with our conception of capitalist. He is the man whose immediate aim is the acquisition of wealth or what amounts to the same thing, the desire to see his business grow. His chief characteristics are enterprise, acquisitiveness, and the capacity for calculation. Historically, Sombart classifies this type into the freebooter, the landlord, the craftsman, the civil servant, the trader, and the speculator. A more general conception of the type is found in Macaulay's conception that the great mass of men

are interested in improving their material condition and rising in the world. A more scientific characterization of this type is found in Spränger's *Lebensformen*. Spränger classifies men under the six general types: the theoretical man, the economic man, the aesthetic man, the social man, the man of power, the religious man. The economic man has the following characteristics:

- (a) Chief interest in the Useful.
- (b) Utilities uppermost, whether being produced or consumed.
- (c) Not a question of a man's occupation, but of his emphasis. Economists (Marxians, etc.) are theoretical or political, not economic in the sense here used.
- (d) In respect to *knowledge* is interested in its applicability. "What one doesn't use is a heavy burden." Taylorism the result of the economic man turned loose in science.
- (e) In the *social* sphere he is an egoist. Self-preservation is his chief concern. Charity is uneconomic. People have for him a utilitarian value as producers, consumers, potential ex-changers, as possessed of thrift, industry, skill, or other economic qualities.
- (f) In *Art* this type is a misfit. He destroys beauty deliberately to make room for the value which is to him higher utility. Defaces nature for its power or advertising possibilities. Luxury has a meaning for him and with it art is confused.
- (g) Wealth itself is *power*. Over nature and men industry gives control. Individualism and private property indispensable to his point of view.
- (h) In *religion* he sees God as lord of all empires, as the giver of good gifts, protector of crops, argosies, etc.
- (i) Is pragmatic rather than logical; is close to reality; aims to satisfy material needs.
- (j) Pathological extreme is man who places money higher than utilities of which it is a symbol.
- (k) Examples: the banker, speculator, producer, trader, consumer, who see in their position the highest values of existence.

A less systematic and more general conception of man was held by the physiocrats and the group of English classical economists. Their prototype of the economic man was rational, industrious, frugal, calculating, and practical. He was the type that was represented in Benjamin Franklin's *Poor Richard's Almanac*.

(From the historical point of view the prototype of the economic man may be held as one of the reflections of class conflicts. He may be taken as a representative of the rising industrial middle class in contrast to monarchs, lords, courtiers, priests, and their officials and satellites.) Under the feudal and seigniorial economy the ideal of life was different, and the representative man was of a different type. In place of prosperity and gratification he stood for honour, glory, and distinction. Passion in him was stronger than reason. His way of life involved luxurious expenditures, the keeping of retainers and servants, a class that the physiocrats and Adam Smith designated as unproductive workers. In contrast to them the rising middle class had the virtues of industry, thrift, and the talent for calculation. In other words, the type of man dominant in the Middle Ages was the man of power, while the emergent type from the sixteenth century on was the economic man.

Spränger's characterization of the man of power is as follows :

THE MAN OF POWER (POLITICAL)

- (a) The drive is that of self-assertion, the affirmations of one's own will.
- (b) Power must have its social domain, hence the type is, broadly speaking, political (not, of course, merely governmental).
- (c) War is merely the extending of the political with other instruments. Hence the type is frequently military.
- (d) Those who wish independence of alien power may themselves be *Machtmenschen*.
- (e) Favourable to the *Theoretical* sphere so long as knowledge is (or leads to) actual power. Interest in knowledge of human nature (as a "lever," not an end in itself). He who considers *Truth* the mightiest value cannot be a *Machtmensch*. Ends justify means. Favours pragmatism.
In the *Social* sphere, struggle is emphasized (as in Marxianism), and as in Adler's and Vaihinger's philosophies. People are distrusted (as by Nietzsche and Machiavelli). May seek power in social organization (*Kollektivmacht*), but the reason is not service nor love.
- (g) Favours *Economic* activity, for riches are always a means to power. These types easily blended and confused.
- (h) In *Aesthetic* pursuits, art is subordinated to power. Takes to decorations, pomp, splendour in art; insignia of power

Likes phantasies and stories of power. The sport and flirt also use art as a means to power.

- (i) God is the omnipotent. May feel himself a servant of God, or allied to God. Considers religion a matter of sovereignty; believes in theocracies; is ecclesiastical.
- (j) Bismarck's inability as *Machtmensch* to orient himself by Kant's imperatives (theoretical).
- (k) Manifold varieties: organizers, warriors, leaders, tyrants, etc., acting in all of the six *Wertgebiete*.
- (l) Power over oneself is often a form of this drive or value concept.

There are several historical reasons for the rise of the concept of the economic man. One was that under the domination of the man of power type the ideal of military and national glory had plunged the great mass of people into poverty and misery. From the point of view of the general welfare the glory ideal had failed in the homeland of physiocracy. The military adventures of Louis XIV ended in defeat rather than victory, Canada and India were lost, and the majesty that surrounds a king did not exist for Louis XV and Louis XVI. Nationalism and the power ideal ended in disaster.

The emergence of the man who used reason was also stimulated by the teachings of Rousseau. Rousseau not merely denounced the abuses of his age but argued that man has gone through a long process of degeneration due to the iniquitous development of civil law, church authority, and social custom. Since reliance on authority and tradition had failed, the way was open for man to use his intelligence. This men always had done, although in earlier ages their attention had been directed toward other than economic problems.

W. S. Davis¹ states that: "from 1517 down to, say, 1700, the efforts of human thought had been mainly directed to the attack or defence of the Catholic Church during the Protestant Reformation and all the struggle that came after it. By 1700 most of the Western World had settled down as either permanently Protestant or permanently Catholic. Neither by blows nor arguments could either side eliminate the other, and the

¹ Davis, W. S., *History of France*.

zest of combat was therefore lost. Men were drifting away from the questions of admission to heaven or hell, and (even as in the Italian Renaissance) were reverting to the problems of the present world."

When men began to direct their thoughts from religious to economic problems, a new type of man became more prominent, the economic man of the English classical economists. Another reason for the emergence of the type, economic man, was that this type could be integrated by the physiocrats not only with their economic policy but with their *laissez-faire* attitude towards commerce, their individualism, their ethics and religion, their rationalistic philosophy, and their use of the deductive method.

The materialistic phase of the economic man concept may also be explained historically as parallel to their reaction against the kings, nobles, and priests, whose economic contribution was in the form of services or immaterial goods. Closely connected with this was the increasing need for capital. The industry and frugality which were primary virtues of the economic man abstraction made possible the accumulation of capital, whereas the extravagance of the court and the upper classes had a contrary effect. In the words of Henry Higgs,¹ "here is a country abounding in natural resources, but production is starved in its infancy for lack of capital. Yet capital is only to be obtained by setting it aside out of the fund created by production. If this fund be turned into channels where it is not available for utilization as producer's capital, the nation is doomed to sterility."

The characteristic of industriousness, another quality of the economic man concept, was, doubtless, a virtue imposed by necessity upon practically all men except those of the traditionally upper classes. The later political sympathy of the French with the American colonists, who as a group were engaged sedulously in improving their economic condition, and, of course, the personal popularity of Franklin, may have done

¹ Higgs, Henry, *The Physiocrats*, p. 37.

much to popularize the concept of the economic man in France. Besides, as Marshall has pointed out, industry and economics appeal especially to the practical, rational side of man. In other respects men may be non-rational, but the ordinary business of earning a living is the phase of conduct in which man is most deliberate and calculating.

Since, therefore, the concept of the economic man fitted in with the general needs of the time, it came to be used by the physiocrats and the classical economists as an instrument of social reform. Modern psychologists contend that the notion that the economic man type is a characterization of universal nature is a gross fallacy. Many modern psychologists describe the human mechanism as plastic, and capable of a great variety of conditionings. Spränger's six types are merely more or less arbitrary classifications of faculties and unit traits which may be almost infinite in their possible combinations. This plasticity of human nature makes the economic man concept a useful instrument of propaganda for social reform. By asserting the doctrine of the economic man the reformers and publicists like Turgot, Franklin, and Adam Smith could help make this type fashionable, could help condition people into that type of mental habit pattern. The philosophy of the economic man thus became a laudable type of social propaganda, a philosophic justification for a progressive historic movement. Thus the economic man philosophy was one phase of the propaganda of a rising social group, the industrial middle class. As representing this class in France the propaganda of the physiocrats took the forms of natural rights, individualism, and the economic man.

Besides these theories or principles of the physiocrats, which in a broad sense may be classified as fictions, there were other even more extravagant notions, which may be justified or at least explained by the conditions of the times. One of these was the idea that agriculture alone produces a net product, and that commerce and industry are sterile—that is, do not produce more than enough to repay their necessary expense. Another peculiar notion of the physiocrats was their idea of the shifting

of taxation by virtue of which the incidence of all taxes was on land. J. M. Clark¹ states that these notions were methods of sugar-coating arguments which were used against mercantilism and the unjust, corrupt, and inefficient tax system. This system burdened trade and enterprise, and especially the labour of the peasants; and exempted the church and the landowning aristocracy. "Thus Physiocracy was an attack on the greatest vested interests of the time, though it was sugar-coated by the argument that these interests already bore the ultimate burdens of taxation and that if they should bear them directly they would actually have more left than before, on account of the increased productivity which would result from removing the burdens on work and enterprise. Whatever may have been the intellectual roots of this idea, it seems clear that without such a sugar-coating no doctrinal attack on the exemptions of the privileged classes could have failed to bring its advocates to the Bastille." The extravagant character of these notions led to the failure of physiocracy as an explanation of economic life, and the political revolution soon obviated their necessity as socio-political propaganda.) Thus the non-scientific factors in the movement may be classified into two groups, first, the more extravagant fictions or rationalizations which had only a temporary vogue, and, second, those which became established in the thought habits of the race, and which have persisted in some form up to the present. In addition, (there was the factor that may be called the scientific phase of the movement, the one arising out of the need of meeting the exigencies of the actual situation. The practical programme when understood becomes the scientific phase of the movement. This material for a universally valid economic science which was furnished by the physiocrats could be classified under the headings of scientific agriculture, free trade, internationalism, and world peace.)

Although the physiocrats did not long hold dominance as a school of thought they were not without success in the field of

¹ "Adam Smith and the Currents of History," in *Adam Smith*, p. 64.

practical politics and public affairs.) According to Henry Higgs they promulgated the view that a good action increases the welfare of society. They dealt a powerful blow at the theory of the economic omnipotence of the state. They showed that taxes do not always rest where they seem to fall and that in the long run the state suffers from an unfair and unequal distribution of state burdens. Their advocacy of direct taxes is being realized in modern fiscal systems. The treaty of commerce with England in 1786 was a success of the physiocrats in the field of politics.) At the Revolution, as they had advocated, the *corvées*, the farming of taxes, and *jurandes* were abolished, and a tax was laid on all land without privilege or exemption. Higgs adds that Adam Smith and Pitt, Huskisson, Peel, and Gladstone repeated their arguments in persuading Great Britain to adopt the policy of free trade.

Returning to the concept, the economic man, J. N. Keynes asserts that the mistake of the economic man abstraction is that of mistaking a part for the whole. This is in a sense a fiction or deviation from reality. Vaihinger states that "Adam Smith laid down as an axiom the fictional proposition that it appears as if all economic and commercial behaviour were dictated solely by egoisms." Hence a controversy arose as to whether Adam Smith formulated his assumption as a hypothesis or a fiction. Lange in his history of materialism finds Adam Smith's axiom as a fiction based on methodology. Adam Smith wrote a work on moral philosophy, *The Theory of Moral Sentiments*. Hence the *Wealth of Nations* is not an independent unit, but merely one portion of a complete moral philosophy. This work examines mankind from the point of view of egoism, the other from that of sympathy and altruism. Lange adds that in *The Wealth of Nations* the axiom is completely asserted that everyone in pursuing his own advantage at the same time furthers the good of all. The government is to maintain freedom for this struggle of interests. Starting from these principles, Smith deduced a play of interests, through the working of supply and demand in the market. Yet this *market* interest was

not to him the whole of life, but only an important side of it. His successors forgot the other side, and confounded the rules of the market with the rules of life, even with the elementary laws of human nature. This method gives a logical simplicity and exact form to social theories, but only a relative truth. To the extent that this truth is only relative it may be classified as a fiction.

What is the relation of this economic man as a fiction to the economic theory that is advocated in this study? The concept of the economic man is one aspect of the rationalizing of a policy based on the need for emphasizing a neglected part. If the economic man substitutes a part for the whole, our thesis is that in the sixteenth and seventeenth and more in the eighteenth and nineteenth centuries this part was a neglected part. Accepting Professor Davenport's dictum that the factors in economics are legion, some factors as subdivisions of the human element in production may be viewed as psychological types. The economic man was a backward factor under conditions of inventions and improvements in commerce, agriculture, and manufacture, and in the development of capitalistic methods and the need of accumulated surplus. The interests of this class of men were, therefore, in harmony with the general public interest. Their services were in great need, were relatively scarce, and were increasingly within the economic potentialities of the time. The rise of this class may, then, be viewed as working out according to the economic laws of value. The doctrine of the economic man was a socially useful fiction.

CHAPTER VI

EARLY CLASSICISM

As outlined in the first chapter, the method of this study is based on an analysis of factors or logical elements in the economic situations. These factors, or logical units in analysis, are partly derived from the history of economic theory and partly from industrial history. Back of both of these divisions of economic study are historic movements. These in general represent the expansion of some economic factor at an accelerated rate so that it attracts the attention of practical men and historians and philosophers. The more thorough and acute analysis of the new factor, the progress of industry or thought, may lead to sub-classification and differentiation, which may in effect bring about an increase in the number of units or factors in the theoretical analysis of the problem. A new term, a new subject of analysis, may mean, then, an advance in industry or thought, or a new problem arising out of the increasing complexity of industry.

If the historic movements are notable in scope or momentum, they are described by historians as revolutions. Thus there were the Commercial Revolution, the Agricultural Revolution, and last, the Industrial Revolution. The method of this study is to represent the theorizing of each of these revolutions as a special type of economic theory. The theorizing of the Industrial Revolution gives us English classical economics.

Identical with these historic movements is the rise of social classes. A social class, although in some respects a type of fiction, in its realistic aspect consists of all of those individuals who have some important interest in common. The movement generates the class, and theorizing by or for the class generates the economic theory. Exploration and trade produced the merchant, and the trader's philosophy became mercantilism. The progress of agriculture and the consciousness of the need

of agrarian reform produced physiocracy. The development of manufacture occasioned the rise of new social classes. The medieval background furnished the spectacle of class conflicts as between kings, priests, nobles, and common people. And history records the rise and differentiation of the latter group. Out of the third estate arose first of all the merchant and trader who, in many cases, bought or married his way into the nobility. In England many members of this class bought land, and contributed much toward the improvement in agriculture. If the children of merchants as a rule continued in trade or devoted themselves to large-scale farming and the social and political life of country gentlemen, it is probable that the mass of the rising industrialists were the descendants of the handicraft workers of an earlier age, or even men of poorer classes who inherited or acquired the traditions of the eras of handicraft and domestic industry.

A rising social class is characterized by what it reacts against as well as by its contribution. A rising class develops under conditions of institutional handicaps. In the latter half of the eighteenth century, society was still largely privileged and aristocratic. "Socially, education was still the privilege of the few, and the common people were rather frankly regarded as instruments of production, food for powder, and means of sustaining the elegance of the gentry."¹ The class conflict developing out of the new class alignment represented the effects of the impact on a still partly-feudal society of the new economic forces represented by the rise of manufacture. The disqualifications of the rising industrial class were the privileges represented by the existing institutions, the monarchy, the landed estates, the guilds, and the systems of state monopoly. The economic theory which is the theorizing of the new industrial movement in the interest of the rising industrial classes is thus partly negative, a rationalization of revolt against the privileges and domination of the classes in feudal and monarchical society, and partly positive, a theorizing of the

¹ Clark, J. M., *Adam Smith*, p. 59.

factors developing in the new industry. In this sense an economic theory is the rationalization of the economic interests of the class. The rationalization of the interests of an established and dominant class is a conservative theory. The rationalization of the interests of a new and rising class is a liberal or radical theory.

In so far as a particular economic theory is a rationalization of class attitudes and interests we may expect an element of bias. The theory is a matter of belief, and belief is partly a matter of tradition and partly a matter of the desire of the individual. If we omit the factor of tradition, we tend to believe what we want to believe. Psychologists hold that thought cannot be classified exclusively into day-dreaming and reflective thought. These are two extremes differing only in degree. Theory is likely to be distorted by desire, especially when the "subject stimulates the emotions."¹ The emotional drive of the more ambitious and capable of the middle and lower middle classes was the desire to share in the advantages of the aristocratic life.

One way for a rising class to justify its purpose, as has been discussed in an earlier part of this study, is to deny the premises and postulates of the established class or classes against which they are reacting, and to substitute opposite first principles or premises to justify the revolt from the accepted order. One of the assumptions of the early classical school was that of natural law or natural rights. This, as has been pointed out before, was a reaction against the principle of the divine right of kings and the clerical, seigniorial, and monopolistic rights and privileges of the earlier dominant classes. Natural rights are a concealed form of personal wishes. In the words of Professor Lindsay,² "Theories of natural rights are statements of ideals which pretend to be statements of facts. They cover up sound statements of what ought to be under false statements of what has

¹ Ogburn, W. F., "Bias, Psychoanalysis, and the Subjective," *Papers and Proceedings of the American Soc. Soc.*, December 1922, vol. xvii.

² Lindsay, A. D., *Karl Marx*, p. 61.

been, or good ethics under bad history." The concept of natural order, natural law, and natural rights has been shown by Professor Haines¹ to be so vague and variable as to be used as a sanction for either side of many of the most important debatable social questions. The conception of natural law in the eighteenth century, however, was a premise for the justification of a democratic, liberal, idealistic movement.

Closely connected with this concept of natural rights is the probable social origin of the early manufacturing classes as discussed above. The idea of specific causation, which is the basis of "natural right," is a tradition out of handicraft culture. As Veblen has pointed out,² in the technology of handicraft the central fact is the individual workman with skill, industry, and initiative. In the rise of this class the right of ownership became inculcated in law and custom and common sense through the connection between productive labour and the accumulation of property. As formulated by Locke, this view was that man has a natural right to that with which he has mixed his labour. This is obviously a reaction against the right to the usufruct of property acquired by inheritance, where the enjoyment of economic goods is made possible without economic effort. Since in the era of handicraft industry the only means to property ownership in the case of the craftsmen was productive effort, the concept of effort as the basis of ownership was an expression of the traditional attitude of the class. Veblen explains how this notion found its way into theology: how the concept of Heavenly King was abandoned for that of Creator or First Cause. Now the main question was no longer "What hath God Ordained?" but "What hath God Wrought?" The view that the idea of natural law held by Locke and his followers was a rationalization of an unprivileged class, which was rising to prominence by means of industry and frugality, by means of earned income, may be enforced by another observation. Privilege, the right to unearned income, was based

¹ Haines, C. G., *The Revival of the Natural Law Concepts*.

² Veblen, Thorstein, *The Theory of Business Enterprise*, chapter v.

primarily on the right to inherit land, which was the basis of the power of the nobility. According to Locke, one does not have a "natural right" to rent; for he has a right to own only that which he has "mixed his labour with." If this theory had been accepted in its logical implications, it would have justified the decline of the country gentlemen and landlords, and the rise of the artisan-manufacturer-enterpriser to wealth and power. In brief, the concept of "natural rights" at that time was a rationalization of the rising middle class. Modern varieties of justification for property ownership are inheritance, creative activity, or social utility. That creative activity alone in the case of Locke and his followers was viewed as the basis of ownership was entirely natural in the case of the group that was rising from individual effort to positions of property ownership and direction of industry. (The assumptions of the two main conflicting classes in the eighteenth century as a justification of property ownership were thus inheritance and creative activity.)

Another doctrine of early classicism which may illustrate the theorizing of the interests of a developing class is the labour theory of value. The classical theory of distribution was mainly a cost-of-production theory. And cost of production was prevailingly interpreted in terms of labour. Thus value had a basis in creative effort the same as ownership of property. Natural right and economic value had a cognate origin. Whether or not such a connection was evident to the early economists we can only conjecture. (Perhaps the labour theory of value was the result of a series of eliminations.) The mercantilists traced value to gold; the physiocrats, to land. And, on the theory of specific causation, labour was the only other major factor available for exposition. At any rate, the emphasis on labour value was in harmony with the other postulates and premises of the early classical theory.

/ Another doctrine of the early classicists which may reflect the attitude of men who are living in a state of transition from craftsmen to entrepreneurs was the distinction between pro-

ductive and unproductive labour. At present productive activity is held to be the creation of utilities or the acquisition of the immediate means to utilities. The sources of utilities may be physical commodities or personal services. But in the philosophy of Adam Smith and his school the term "productive activity" was limited to the creation of tangible, material objects. This, again, may be an unconscious acceptance of a class tradition out of the handicraft culture. The craftsman produced material commodities. The government as well as the nobility and clergy furnished the immaterial forces and "spiritual" contributions of the time. They produced law and order, morality and valuations, privileges and fictions. It may be that the concept of productive labour of the early classicists, their identification of wealth with material objects, was a reflection of a class or occupational outlook, a rationalization of their protest against the burden of priests, nobles, and government officials and favourites whose services or whose privileges were of an immaterial nature.

(The concept of class interest and class attitude may also throw light on another premise of the classical economists, their individualism. Adam Smith and his followers adopted the individualistic philosophy for the same reason as the physiocrats. Individualism was a democratic, social reform philosophy, the same as the natural rights philosophy of Locke, the labour theory of value, and the distinction between productive and unproductive labour. This individualism was a philosophy reflecting the attitude of the rising industrial classes in opposition to that of the older privileged classes. In the words of J. M. Clark, "Adam Smith was the interpreter of the forces of economic liberty against certain types of restraints prevalent in the mid-eighteenth century, and of the interest of the country as a whole, viewed from a standpoint in which the common man had a large part, as against the exploitive interests of the particular classes then in power."¹ As will be explained later, there is a sense in which this individualism

¹ Clark, J. M., *Adam Smith*, p. 58.

represents scientific and problem-solving thought. At the same time the philosophic conception of atomic individualism, of the separate person as unconditioned and unrelated, may be viewed as a rationalization of the same general class as natural rights. It is false or questionable theory pressed into the service of a progressive movement. It was poor philosophy in support of good history. Since the individualism accepted by the early classical economists was the same as that of the physiocrats, the reader is referred to the more complete treatment of this topic in the chapter on physiocracy. Historically, individualism was a philosophy arising out of the struggle for liberation from oppression and tradition, from control by the privileged orders. Since authority was on the side of the old institutional order, men postulated atomic individualism and an inalienable sacred authority in the protesting individuals. Their attitude of *laissez-faire* or the limitation of governmental functions had the same source. It was a short step from individualism to the conclusion that the sole function of government was to protect individuals in the rights which were theirs by nature. This was in contrast to the older conception of the function of government, which was to uphold the aristocratic institutions—the court, the inherited estates and seigniorial rights, the guild and state monopolies, and the army and navy which protected them. Opposition to the army and navy would logically have followed and allied itself to internationalism. This latter step was not entirely taken by Adam Smith, which was one of the many respects in which, as has been pointed out by economists, he was inconsistent. It is significant that the influence of the classical school was on the whole in favour of internationalism, and that the leading French disciples of Adam Smith, Say, and Bastiat, as well as their predecessors, the physiocrats, were in favour of peace, free trade, and the spread of the cosmopolitan spirit. It is true that there were historic and political justifications for individualism if that term is defined as a policy which promotes the rise of the individual proprietorship and the business partnership in place of the government monopoly.

This aspect will be considered below. Individualism as a philosophy may be considered as a rationalization, a spiritual weapon of defence and offence in the hands of politically unprivileged people, many of whom were on the move from what may be termed rather arbitrarily the lower middle to the upper middle class.

) The psychological assumptions of Adam Smith or the abstractions he and his followers invented to motivate their economic system, the concept of enlightened self-interest, or the more formal conception of the economic man, was another form of social philosophy or social propaganda in line with the interest of an unprivileged but alert and enterprising class. The economic man concept as a form of rationalization has also been developed in the chapter on physiocracy.¹

These, then, in general may be viewed as forms of rationalization in the early classical political economy—natural law and natural rights, the labour theory of value, the distinction between productive and unproductive labour, philosophic individualism, and the concept of the economic man. Although these rationalizations of class interest were based on fictions or invalid distinctions, yet they were made in the interest of an idealistic, liberal, and democratic movement. Historically and pragmatically they may have been justifiable; but philosophically they were in the nature of an overcorrection of feudal and aristocratic presuppositions.

The classical economics, however, was much more than rationalization, than reasoning from assumptions based on the unconscious bias of group self-interest. Probably the classical theory in large degree could be classified as scientific analysis or problem-solving thought. The classicists dealt mainly with the subjects of production and distribution. Adam Smith made significant contributions in both of these fields of thought, the view held in this study, however, is that his primary contribution was in the field of production economics. In this subject his successors did scarcely more than reproduce his

¹ Pages 66-71.

material or refer to his masterly exposition. The contribution toward an understanding of distribution under a system of individualism was rather the work of Ricardo. One can, then, somewhat arbitrarily classify classical economic theory into two types: early classicism, represented by Adam Smith, in which there were made the most significant contributions toward production economics; and later classicism, represented chiefly by Ricardo, but secondarily by Malthus, in which the chief subject was value and distribution.

That earlier economics emphasized production was the view of Arnold Toynbee.¹ "The earlier economists, like Adam Smith, were concerned with production. Increased production was necessary for man as an instrument of social and political progress and the old economy succeeded in establishing new conditions of production." The title, table of contents, and order of Adam Smith's book indicate the primacy of his interest in production. Thus the book is entitled *The Wealth of Nations*. Book I² the author calls "Of the Causes of Improvement in the Productive Powers of Labour, and of the Order according to which its Produce is naturally distributed among the different Ranks of the People." That is, he begins with the problem of production and proceeds to the problem of distribution. The chapters of Book I begin with (i) The Problem of Production; (ii) Of the Principle which gives occasion to the Division of Labour; (iii) That the Division of Labour is limited by the Extent of the Market; (iv) Of the Origin and Use of Money. These subjects lead to market price, the component parts of market price, the difference between natural and market prices, and finally to an analysis of profits, wages, and rents. In other words, Adam Smith begins with an exposition of the advantages of the division of labour and its effectiveness in the increase of production. He goes on to point out that the division of labour rests upon exchange. An efficient exchange calls for the use of money; the use of money

¹ Toynbee, Arnold, *The Industrial Revolution*, p. 25.

² Chapter i "Of the Division of Labour."

brings in the idea of prices, and the idea of prices leads to a discussion of the component parts of price. The discussion of the component parts of price contains what Adam Smith has to say about distribution, for the component parts of price are wages, rents, and profits. Obviously the whole discussion proceeds from the problem of production. In fact, Professor Mitchell observes¹ that the introduction shows how hard Adam Smith seemed to be put to it to bring in the topic of distribution at all. A large part of the rest of the books is devoted to the subject of production. Book II he calls "Of the Nature, Accumulation, and Employment of Stock." This deals with the contribution of capital to production. Book III is a short book called "Of the different Progress of Opulence in different Nations," in which he deals with the factors which stimulate or retard national wealth. Book IV, "Of the Systems of Political Economy," is a critical attack upon the Mercantilist System. One of the great questions of the time was the removal of restrictions and the establishment of freedom of trade, especially between nations. It was the attainment of more complete regional division of labour. Free trade and international exchange is thus a principle of production economics. Hence Book IV of Adam Smith was concerned primarily with production. Its purpose was to break down the economic fallacies which restricted the division of labour. The division of labour required freedom of exchange and was limited by the extent of the market. Hence the famous Book IV was primarily a phase of production economics. Professor W. C. Mitchell believes that Adam Smith's most creative work was done in the field of production. His treatment of distribution was borrowed in part from the physiocrats.

The introduction of this theory of distribution, which presently became in the eyes of technical economists the most important part of the *Wealth of Nations*, seems to have been due to Adam Smith's converse with the Physiocrats. The reprint of a student's notes upon his lectures given in 1763 does not treat "the component parts of

price." When Adam Smith reached Paris, met Dr. Quesnay, and conversed with Turgot, who was then writing his admirable little book upon the formation of riches, he found the physiocratic group making much of a topic which had hitherto played but a slight rôle in his discussions of economic problems. Quesnay had hit upon the general conception that the real wealth of a country does not consist of its stock of gold and silver, as the Mercantilists kept saying, perhaps without really meaning it; its real wealth consists fundamentally of the supply of useful commodities which are turned out by its workers year after year. He hit, in other words, upon the idea which is stressed in Ricardo's preface and developed in Alfred Marshall's conception of the "national dividend." In discussing this "national dividend" Quesnay was led to take up the question how it is distributed among the people who co-operate to produce it—among the labourers, the landowners, and the employing classes. Now Adam Smith brought back from Paris a keen interest in this problem. In deliberating upon the matter during the ten or eleven years when he was writing *The Wealth of Nations* in Kirkcaldy, he worked up his reflections upon the Physiocratic doctrine into his own discussion of the component parts of price. So, to repeat, we seem to owe this section of *The Wealth of Nations* that has exercised so much influence upon the further development of economic theory to the stimulation of the Physiocrats.¹

Professor Taussig, on the other hand, holds² that the modern approach to the subject of distribution was invented by Adam Smith. "The simple division under the heads of wages, profits and rent in itself marks an epoch. Something of the sort may indeed be said to underlie the physiocratic separation of the three classes—the productive, the barren, the disposable; but the most cursory comparison shows how much closer to the actual phenomena was Adam Smith's classification of income and income-receivers. Under each head, again, he advanced far in the direction which subsequent thought has followed to our own time." Perhaps one may prefer to credit Adam Smith with being the source of later production economics or distribution economics, according as to whether one more approves the classical theories of production or the classical theories of distribution.

¹ Mitchell, W. C., Unpublished Manuscript.

² Taussig, F. W., *Wages and Capital*, p. 34.

Adam Smith's great work was an expression of an acute economic analysis at the beginning of the Industrial Revolution. The pressing social-economic problem of the time was that of increased production. Adam Smith became the prophet from the production viewpoint of the new industrial movement. The rise of the factory system, large-scale, indirect, capitalistic production, the need of saving and parsimony to provide the money to finance the creation of new capital; the need of wider and wider markets to furnish an outlet for the goods produced by the larger and more efficient plants; hence free trade and international goodwill, and the mutual benefits of both parties from trade; the concept of wealth as abundance of physical commodities; the relation between imports and exports—the utility of exports as a means to imports; the conception of money as a tool, a labour-saving mechanism—all these are characteristics of Smith's theory which made him the prophet of the Industrial Revolution, and probably also in large measure a contributor to a permanent social science. It is true that an economist like Othmar Spann¹ holds that Smith's main contribution was in the field of market price, of value and distribution. Spann, however, is a neo-mercantilist. He is so obsessed by the nationalistic fallacy, the super-individual, metaphysical theory of the state, that he minimizes what to other economists seems to be Smith's main achievement, and credits him with contributions in a field in which his work was probably surpassed by that of Ricardo.

In the treatment of the problem of distribution both Adam Smith and his successors worked from certain definite premises or postulates, although they may have been scarcely conscious of them. Some of these, of a more metaphysical nature, have been considered as fictions. Such were natural rights and natural law, philosophic individualism, the labour theory of value, the notion of unproductive labour, and the psychological abstraction later known as the economic man. Other postulates implied rather political, legal, and social insti-

¹ Spann, O., *The History of Economics*, p. 110.

tutions. These the early economists assumed as if belonging to a natural order.

One of the major assumptions was that of free competition. That implied an absence of governmental interference with private enterprise. In the beginning this was more of an ideal than a fact. Yet during the life of Adam Smith private enterprise was developing, as among the Glasgow merchants and manufacturers; and the direction of industry by the government was being abandoned, partly because of the incapacity of the king and his ignorance of the English language and English conditions, and partly because the expansion and dynamic character of industry had outgrown the old forms of organization and regulation. Professor W. C. Mitchell¹ states that "the new theory was an intellectual reflex of a new practice of individual initiative in economic affairs—new at least in its scope and in its disregard of repressive conventions; a new practice that was growing up in England during Adam Smith's time. The faith that Adam Smith had in individual initiative as opposed to reliance on the sagacity of the statesman was the result of his reflections on what he saw about him." With free competition there was assumed a stable, efficient government, able to maintain law and order, and to preserve other conditions essential to the development of industry—private property, inheritance, the enforcement of contracts. Free competition also, of course, assumed the absence of industrial monopolies, either public or private. These political and legal conditions were supplemented by assumption of social conditions and conceptions of the fundamental nature of man. Arnold Toynbee² enumerates the assumption of classical economics as private property, perfect mobility of labour, and a perfect knowledge of wages and profits at all times and places. Walter Bagehot³ maintained that freedom of competition and mobility of labour and transferability of capital were preconditions for the validity

¹ Mitchell, W. C., Cf. Unpublished Manuscript.

² Toynbee, Arnold, *Industrial Revolution*, pp. 6, 7, 11.

³ Bagehot, Walter, *Postulates of Political Economy*.

of the classical theory of distribution. Thus the economic theory would be invalid under conditions of slavery or of the manorial economy, where men are bound to the land. It would be invalid without a variety of occupations and economic opportunities, and without division of labour and exchange; or, in other words, without trade, transportation and money, banking and credit facilities. For the complete functioning of the classical theory of distribution there was also requisite a certain amount of truth in the concept of the economic man. The mass of people should be actuated by a strong desire for an improvement in their practical station in life, for an increase of wealth, or for more satisfactions from economic goods. And it must be a fact that men on the average are better judges of what is for their own good than the average statesman or public official who is in office at the time. In brief, the premises or assumptions on which the classical theory of distribution might be valid are: free competition; the mobility of labour and capital; the police form of government; private property, inheritance, and free contract; the absence of monopoly; and the approximate truth of the concept of the economic man.~

In so far as these social, legal, and psychological conditions are realized there will be an automatic adjustment of the industrial system, which will make for justice, prosperity, and progress. This adjustment is brought about by the price system and the automatic operation of the law of supply and demand. Market value in the long run tends to equal the cost of production. If because of new raw materials, new inventions and improvements, or changes in demand, the market price of any commodity or service should be above or below the cost of production, or if in other words the market price should vary from what Adam Smith called the natural price, forces would be set in operation which would restore the natural balance. Capital and labour would tend continually to flow out of industries and occupations in which the demand was below or supply above the average, and to flow into industries and occupations in which the demand was above or the supply

below the average. In this way the return to capitalists or labourers of equal ability would always tend to be equal, owing to the mobility of labour and capital, the assumed knowledge of economic opportunities, and the assumed desire on the part of the great mass of men to subordinate all other purposes to the betterment of their economic position.

On the basis of these assumptions one logically reaches the theory of specific productivity; namely, that each unit of land, labour, and capital will be rewarded in proportion to its economic contribution. If any wage-earner, for example, should be receiving in wages less than the market value of his contribution to the final product, he could demand an increase in wages, and the competition of employers would enable him to receive a rise until his wages equalled the value of his contribution. In the same way, if any industry were returning profits greater than the average, it would automatically occasion an inflow of capital and enterprise. In turn, increased supply would force down the market price until the return approximated the normal, or until the return equalled the cost of production; so that the profits of all producers of equal ability would be approximately equal.

This automatically self-regulating system based upon private initiative and free competition was an ethical system. The productivity theory, like the natural rights theory, or the labour theory of value, made possible a harmony between private and group purpose. In a period of relatively backward economic production under conditions in which labour and industry were unable adequately to supply the needs of men, one of the first social problems was that of increased production. Under a system of market price which guaranteed men on the whole the equivalent of their economic production there was a great incentive to industry and efficiency. Contribution to the social welfare was proportionate to individual return, so that there was harmony between the individual and society.

This harmonious scheme of the automatic action of natural laws, in contrast to the aristocratic systems which prevailed

in the ages of the Canonist doctrine and mercantilism, was fundamentally democratic. The assumption that men were rewarded in proportion to their product would have obviated economic privilege in proportion as the social and legal assumptions of the classical economies were realized in fact. Thus the classical theory was based upon the assumption of a democratic movement. This democratic movement was ethical in its nature; it assumed the principle of the greatest good to the greatest number. It admits the under-privileged to conditions of equality, that is, equality relative and proportional to their own ability and industry. The labour theory of value is an ethical theory. The specific productivity theory is an ethical theory. It is based upon the ethical-economic principle of justice, which assumes in the field of industry a distribution according to the efficiency of action that is beneficial to the whole community.

These theories involved also a harmony between economic theory and religion. The identity of self-interest and the general interest was in line with the natural philosophy of the eighteenth century, the belief in a benevolent Deity. Toynbee¹ states that "Two conceptions are woven into every argument of *The Wealth of Nations*—the belief in the supreme value of individual liberty, and the conviction that man's self-love is God's providence, that the individual in pursuing his own interest is promoting the welfare of all." The clergyman Malthus gave this opinion its most theological form. "By this wise provision," he says, "i.e. by making the passion of self-love beyond comparison stronger than the passion of benevolence, the more ignorant are led to pursue the general happiness, an end which they would have totally failed to attain if the moving principle of their conduct had been benevolence. Benevolence, indeed, as the great and constant source of action, would require the most perfect knowledge of causes and effects, and therefore can only be the attribute of the Deity. In a being so short-sighted as man it would lead to the grossest errors, and

¹ Toynbee, Arnold, *Industrial Revolution*, p. 11.

soon transform the fair and cultivated soil of human society into a dreary scene of want and confusion.”¹ Thus it is evident that the early classical economics in so far as it was under the influence of Adam Smith was democratic, liberal, and optimistic; there was no inconsistency in Adam Smith’s authorship of *The Theory of Moral Sentiments* and *The Wealth of Nations*. That was a far cry from the conception of the pro-social character of industry and money-making to the ethical disapproval of wealth in antiquity and the Middle Ages.

(The question as to the truth or scientific value of the Adam Smith economics involves a number of considerations. On the side of production the view held in this study is that the classical tradition still holds good. As to the problem of distribution the attitude is mixed! It is granted that there is a large element of fiction, of rationalization in the interests of a special class. Yet the rationalization in the interest of a group may be classed as pro-social theory, if the interest of the class coincides with that of the community, if it is concerned with increasing the deficient factor in the economic complex, or that factor which is most expandable under the given conditions of the time. According to the trend of thought in this study, economic theories of different types have developed as theorizing, in part rationalizing, the interest of nascent groups who were fighting for their own hands, and yet incidentally contributing to progress or to permanent trends in economic life. Thus mercantilism theorized the attitude of the absolute monarchy, and this worked in the direction of freer trade and economic progress. Mercantilism rationalized the Commercial Revolution. Physiocracy rationalized the Agricultural Revolution, and the early classical economics of Adam Smith rationalized the trends of the first stages of the Industrial Revolution. In such cases a certain amount of rationalization does not discredit a type of economic philosophy as a series of useful social generalizations.

To what extent is the deductive method in reasoning com-

¹ Toynbee, Arnold, *Industrial Revolution*, p. 12.

patible with scientific conclusions? In other words, what is the relation of the deductive or speculative method to a scientific or quasi-scientific method? Are the early classical generalizations in the field of distribution the outcome of reasoning from fancies derived from the unconscious wish? Or are they examples of problem-solving thought? Are the classical laws merely hypothesis for statistical investigation, or is there in them an element of realism and practical value as a guide to individual choice and public policy?

Assuming the quality of logical consistency, the value of a piece of deductive reasoning is proportional to the reality of the premises. If the postulates and premises are true, and the reasoning accurate, the conclusion should be correspondingly useful or valid. In defence of the early economic theory of distribution it may be said that the postulates and assumptions of classical economics were to a large extent the peculiar social-economic conditions of the time. The assumptions of the classicists which we have enumerated but not accounted for were the contemporary political, social, and legal institutions—free competition, a free market, facilities for the transfer of capital, private property, contract, inheritance, a trend toward the preference for the police form of government, and the rise of sentiment in favour of removing restrictions against the free movements of labour. That classical theory was relative to contemporary social conditions the economists themselves scarcely realized at the time. It was not fully understood until the rise of historical economics in Germany. Schmoller has expounded the conditions under which the family, the individual, and the community become the economic centres of gravity. The family is the dominant factor under manorial, domestic or frontier conditions, where there is a large degree of economic independence and isolation and small division of labour. The individual becomes the centre of gravity when there is a greater degree of the division of labour. The community comes to the front where there is the most complete division of labour. Adam Smith's book on economics is based

on a social condition midway between the isolation of the manor and the local economy of the Middle Ages on the one hand, and the more fully developed specialization and interdependence of the twentieth century on the other. It was written when the division of labour was developed to the point where it became a separate subject of thought and discourse, a specific economic factor to the acute observer of affairs. This increase in the division of labour was carried on successfully for a while by the method of free individual initiative. Professor Mitchell has summed up this movement as follows:¹

We have a community that was, in comparison with past times, living in large part a life of peace; a community that was turning its attention more and more to bettering its economic condition; a community in which people were more and more largely developing initiative and voluntary co-operation in pursuit of their enterprises; in which the government itself, though running on in the old forms, was gradually becoming a government by public discussion; and in which the central government was taking less and less hand in local affairs, leaving them more and more in the management of local people; and in which the old traditional scheme for regulating the economic life of the people was being infringed upon in countless ways by countless individuals; and in which—and this is the last word I have to say before taking up Adam Smith's adventures—in which the government was scarcely intervening to check the changes that were going forward; in which the government was acquiescing tacitly in the breakdown of a plan in which probably almost all members of Parliament continued to believe theoretically.

(The industrial background of Smith's system was the beginning of the Industrial Revolution) the transition from handicraft domestic industry to the factory system. Factories at first were tiny, the machine was hardly more than a machine tool. Labour was still the dominant factor of production. A later economic analysis emphasizes the increasing rôle of the machine. But in the time of Adam Smith, (according to his own account, the greatest improvement in the productive powers of labour seemed to have been the effects of the division of labour.²) Industry had become capitalistic

¹ Mitchell, W. C., Unpublished Manuscript.

² Smith, Adam, *The Wealth of Nations*, book i, chapter 1.

and indirect in comparison with the domestic and handicraft systems, but nothing in comparison with that of later industrialism.

The time factor was much shorter than in a later economy. The classical economists contended that their economic generalizations were valid in the "long run," but the long run was a much shorter period then than later. The long run simply meant the time it took after the introduction of a dynamic factor for competition to equalize the market and the "natural" price of commodities. This relatively short time made economic events much more calculable than later, and so brought them within the purview and control of the economic man rather than leaving them to the chances of a more remote and less calculable future. In comparison with earlier manufacturing the industry of Adam Smith's day might be called large-scale industry, but it was small-scale industry in comparison with the immense plants and wide industrial integration of the twentieth century. In this sense the observations of Adam Smith might be called the economic philosophy of small-scale industry. At that time and for some years later the characteristic form of industry was the individual proprietorship. The typical unit of production was the small firm, built up within a generation or two and financed and operated by the owner. He furnished the capital, incurred the risk, controlled the policy, selected and promoted the staff, and gave the tone to the whole business. (His incentive was profit; yet he was the one who provided enterprise, who organized the labour force and so made possible the division of labour, and who accumulated capital out of his profits and thus financed the rise of the great industry.) The temporary and personal character of the industry, in contrast to the long trend and institutional impersonality of the great modern corporation and holding company, made competition more immediate and effective. It is probable that incompetence was more quickly eliminated and ability rewarded by success and power.

If, then, one can assume conditions corresponding to the

assumptions, the premises, and postulates of Adam Smith and his followers, one can expect an automatic regulation of industry, a condition of production regularized and operating at increasing efficiency, and a distribution in proportion to efficiency, and so just and equitable. In other words, assume a free market, transferable capital, free labour (a tendency, if not yet fully realized), business organization in the form of the individual proprietorship and partnership, *laissez-faire* and free competition, and wages would be in proportion to the effectiveness of labour; business risk would be minimized in proportion to the foresight and ability of the capitalist managers; and there would be a tendency toward a proportional equality of profits through the influence of market prices. It would seem that the assumptions of early classical economics corresponded closely enough to the main features to the life of the time, so that the theory served to explain in a great measure the actual experiences of men and to furnish a useful basis for a public policy.

The last premise of those listed above which were necessary for the practical validity of Smith's system, the approximate truth of the concept of the economic man, shows perhaps the limitation of early classicism even under the peculiar historical conditions. For, as modern psychologists have reiterated, the economic man is not a universal type. He is only one of a number of important types into which the psychologists may classify the infinite varieties and combinations of human traits. The economic man concept, in so far as it has reality, simply means the type of people in whom economic and business interests predominate over all others. In any age this class has probably been relatively scarce. Yet beginning with the eighteenth century it has assumed a position of greater relative importance. In fact, the economic man, or the capitalist type, as characterized by Sombart,¹ was best represented by the people who in the time of Adam Smith were rising to positions of social and political influence by means of industry. According

¹ Sombart, Werner, *The Quintessence of Capitalism*.

to the thesis of this study, classical economic theory was a rationalization of the attitude and interest of this class. And classical economics represented scientific, social generalizations in so far as the success of this group tended to promote progress and the permanent trend of economic events.

CHAPTER VII

LATER CLASSICISM

ABOUT forty years after the publication of *The Wealth of Nations* English political economy in the hands of the successors of Adam Smith took such a form as may justify the different classification, later classicism. The dominant creative figure in this period was Ricardo, although the view represented by Malthus was an important element in the system. According to Professor N. S. B. Gras,¹ the economics that was dominant at this time might be called the business man's economics. The central figure in this system was the entrepreneur as the man who employed labour, who furnished the initiative and enterprise for the direction of industry, and through whose decisions there was made possible the accumulation of capital, the introduction of industrial improvements and the development of industry. In the words of Professor Gras, "emphasis is on the profits of the business man, not only as the object of private business but as a means to public gain." The work of business men was recognized as the most vital in the state. Their insistence on more liberalism than had been found in the old mercantilistic doctrines had been accepted. The victory of the business man's point of view, knocking at the door of patristic, scholastic, canonist, and mercantilist economics, was now established. Under the banner of the classical school business men could now enroll themselves." The business class was rising to importance because ever since the time of the Tudors the initiative in industrial affairs had been gradually shifting from the monarch to the enterprising members of the middle class. Political power had shifted from the Crown to Parliament, and Parliament became representative first primarily of the agricultural landowning classes and

¹ Gras, N. S. B., "The Business Man and Economic Systems," *Journal of Economics and Business History*, February 1931.

later of the rising manufacturers. Mitchell states that power was shifted from the Crown to Parliament because, at least in part, the holders of the office of king were precluded by their slight knowledge of English and England from taking an active participation in affairs. Administrative work was taken over by a committee of the House of Commons. The country came to be ruled by wealthy people through the sale of seats in Parliament. The wealthy people came primarily from the rural landlord class or from the mercantile-industrial class. A few years before the time of Ricardo and Malthus these classes had not been differentiated in interest. They were united in opposition to the radical democratic movement represented by the French Revolution. After the Napoleonic wars and the triumph of the conservative reaction in England there developed a conflict of interest over the Corn Laws between the agricultural interests who wished to maintain the high price of grain and the manufacturers who wished cheaper food, as a condition of low wages, low cost of production, and successful competition in the world market with manufacturers of other countries. As is well known to students of industrial history, the manufacturing classes were increasing more rapidly in wealth and numbers so that their interests finally predominated.

According to the old English ideas, the proper man to sit in Parliament was, of course, a landlord, and the landed interest held an unquestioned control in practice. It had been found advisable to admit a number of lawyers into Parliament; their special skill was needed in a law-making body. In the course of the seventeenth century, successful business men had begun to work their way in through the purchase of seats—goldsmiths, and the bankers who developed out of goldsmiths. Brewers bought seats in a few cases. After 1688 nabobs from India began to get representation. (Nabob was the name given to persons who had gone to India and acquired a fortune there.) A little later appeared Caribs, who had acquired fortunes in the West Indies, as the nabobs had in British India. Later still, manufacturers began to get in. The Foleys were the first family to succeed in getting a member elected. They were ironmasters who bought land. Then in 1790 Sir Robert Peel, a great cotton manufacturer who also bought land, had himself elected. He was the first of the manufacturers

of the modern type in Parliament, and his son, the great Sir Robert Peel, was the first representative of the manufacturing class to attain Cabinet rank. Thus by the sale of seats Parliament was made to represent the shifting economic power of the country more effectively than if all elections had been carried on according to the traditional scheme.¹

• The emphasis of Ricardian economics was on the subject of distribution rather than on production. In production economics the later classicists merely carried forward the tradition of Adam Smith. The great productive principles were free trade, the division of labour, and the accumulation of capital. It is significant that in the class struggle of 1814 and 1815 between the landlords and the rising business class the business men were in agreement with the economists in this fundamental principle of unrestricted trade and geographical division of labour. Another productive principle emphasized by the later classicists was the accumulation of capital. This was the theory appropriate for the Industrial Revolution, a period when there were a great multitude of inventions, when machinery was becoming larger and more complicated, and when there was a higher proportion of obsolescence costs in industrial production. From now on the field of capital became increasingly dynamic. The factor of capital expenses, involving interest, obsolescence, costs of power, and expenses for experiment and skilled operation, was of increasing importance from the point of view of industrial costs. Under the individualistic social and legal conditions of the latter part of the eighteenth and nineteenth centuries this capital was provided by the savings, or as the economists expressed it, the abstinence of individuals. The later classicists merely repeated or elaborated the famous doctrine of Adam Smith:² "Capitals are increased by parsimony, and diminished by prodigality and misconduct." "Whatever a person saves from his revenue he adds to his capital, and either employs it himself in maintaining an additional number of productive hands, or enables some other

¹ Mitchell, W. C., Unpublished Manuscript.

² Smith, Adam, *Wealth of Nations*, book II, chapter iii.

person to do so, by lending it to him for an interest, that is, for a share in the profits. As the capital of an individual can be increased only by what he saves from his annual revenue or his annual gains, so the capital of a society, which is the same with that of all individuals who compose it, can be increased only in the same manner."¹

The emphasis on the accumulation of capital is the business man's version of the problem of industrial improvement. The whole subject is of much wider interest than the relatively narrow aspect emphasized by the classical economists. Capital improvements involve geographical and technological as well as financial factors. There must be the raw materials or sources of power, and the scientific education or inventive aptitude of individuals as well as financial means and insight into the industrial opportunities for better machines. The emphasis on the accumulation of capital is the theorizing of the entrepreneur economy. Ricardo himself was a successful stockbroker. He was without training in engineering or history. It is quite natural that he should follow Adam Smith's doctrine as to the supreme importance of the business man's contribution to the subject of industrial improvements. The capital that was provided, or the means to finance the technical betterments, came from the savings or economic surplus of individuals. If this surplus had been squandered through "prodigality and misconduct," there would have been no fund for financing the manufacture of the new machines. Hence the changing attitude toward wealth and the idealization of economy or "parsimony." The Middle Ages were full of discussions as to the relative venality of miserliness or prodigality. And the prodigal was on the whole preferred to the miser. With the rise of the Industrial Revolution this attitude was reversed. Wealth now became honourable, and the accumulation of wealth an indispensable social service. The reason for this change of social valuation is probably to be found in the changed proportion of actual and potential factors. In the

¹ Smith, Adam, *Wealth of Nations*, vol. ii, p. 17.

Middle Ages the chief economic factors were land and labour. Tools and machines represented an item of slight significance. Wealth consisted of land (capital) and consumable commodities. Surplus wealth was characteristically a stock of food. If the miser saved this, it would spoil, and its utility would be lost. Hence the desirability of largess and hospitality, and the justification of keeping servants and retainers. And so, too, the reproach of miserliness and the tolerance for prodigality. But by the time of Adam Smith a new factor had swum into their ken. Food could still be given to idlers, retainers, or menial servants. In that case, although men enjoyed the beatitude of a well-nourished leisure, there was no outlook for an increased supply of food in the future; the same factors of land and labour could produce food, but no more than before. But if the man who possessed a surplus stock of food would use it to support inventors and workmen who built factories and machines and installed them in the factories, then the labour power purchasable by the food would have fixed and realized itself "in some particular subject or vendible commodity which lasts for some time at least after that labour is past."¹ "The labour of the menial servant, on the contrary, does not fix or realize itself in any particular subject or vendible commodity. His services generally perish in the very instant of their performance, and seldom leave any trace or value behind them, for which an equal quantity of service could afterward be procured." This suggests the real distinction between giving money or food to servants or retainers or soldiers, who repay one in perishable personal services, and giving money or food to workers who produce material commodities. The real essence of the distinction, as Professor Davenport observed, is not materiality but accumulability. Productive labour was that kind which is employed in creating capital, because at that time capital was the expansible and relatively the backward factor in the creation of which society would enjoy increasing returns in the greatly increased volume

¹ Smith, Adam, *Wealth of Nations*, book ii, chapter iii.

of future consumer's goods. Hence the defect of miserliness became the virtue of frugality or parsimony, and prodigality became a synonym of misconduct. The line of thought implied is somewhat as follows: parsimony accumulates food or money. This supports productive workers. Division of labour, trade, and invention are thus made possible. These increase wealth, which makes possible greater division of labour, more trade, better inventions. There is an evolution of large-scale production and the machine technology, which, whatever their complications, do at least greatly increase the possible supply of consumer's goods. Adam Smith's concept of productive labour is, thus, historically explicable as one aspect of his production economics in an age when social progress demanded more goods, and the means to this end were in sight provided the individuals who had a surplus would save and invest, or, still better, use it themselves in directing labour to augment productive instruments. This subject will be discussed more fully later in connection with the theory of over-production and business depressions. The idea that is emphasized at this point is that the later classical economists merely passed on the tradition of Adam Smith, that their production economics was essentially sound; and that the views of the rising class of business men were in harmony with sound production economics.

The central feature of later classical economics, however, is the theory of value and distribution. The later classical generalizations on the subject of distribution have become the basis of the economic laws in the modern orthodox treatises on economics. In considering the validity of these generalizations, the question arises whether these generalizations are universally applicable or applicable only under certain peculiar historic conditions. Are they based on universal tendencies, on secular trends, or merely on trends that were in point of time of limited duration?

Richard Jones, the German historical economists, and the later expositors of classicism—J. S. Mill, Bagehot, and Marshall

—have emphasized that the generalizations of Ricardo were based on peculiar social, economic, and legal conditions. These in general were a developed system of exchange through the use of money, fairly well evolved facilities for transportation, a large amount of trade and exchange, highly developed markets for agriculture, a developing capitalism or considerable progress in machine technology, free competition, the police idea of the state, private property and inheritance, the absence or comparative absence of monopoly, mobility of labour, business enterprise in the form of the individual proprietorship and the partnership, a relatively short period of time necessary to equate market prices and "natural" prices, a widespread knowledge of economic conditions and opportunities, and a disposition to subordinate all other considerations to private economic gain.

Ricardian Rent

These assumptions of Ricardian economics were to ^{some} extent peculiar historic conditions. The fundamental concept of Ricardian economics was his conception of rent, and Richard Jones, the successor of Malthus as Professor of Political Economy and History at the East India College, Haileybury, held that this was based on assumptions that were valid only within a comparatively recent period of time and over a small proportion of the surface of the earth. Before the time of Jones there were four accepted postulates underlying Ricardian rent: the first that land is limited in quantity and variable in quality; second, that the more fertile land is relatively scarce; third, a postulate added by Malthus, that rent could not be paid unless land yielded produce more than sufficient to sustain the cultivators; and fourth, the highly important postulate advanced by Senior that rent is conditional upon the law of diminishing returns. Finally, Richard Jones in his essay *Peasant Rents* pointed out that the theory of rent pre-supposes a certain definite form of economic organization in which land was held by the class of landlords, in which it was cultivated by a set of capitalist farmers, and in which the farmers got at least the large part of their work done by a

class of wage-earning labourers. The portion of the earth's surface on which these conditions existed was small. It comprised England, the greater part of Scotland, a part of the kingdom of the Netherlands, and spots in France, Italy, Spain, and Germany. On the whole this condition extended over about one-hundredth part of the cultivated surface of the earth, and in this limited field the Ricardian analysis held. Secondary or farmers' rents were based on a developed capitalism, in which a class of men of intelligence and enterprise and accumulated funds applied their capital and managerial skill to the industry of agriculture. Under these conditions agricultural rents assumed the existence of three classes: the proprietors who received rent, the farmers who furnished capital and enterprise, and the agricultural labourers who received wages. This form of agriculture was highly efficient. It brought about the application of skill, knowledge, and capital to the task of agricultural production. It made possible the application to agriculture of the development of science and the accumulation of capital. It made possible a rapid growth of the classes of society unconnected with the soil, the classes which contributed most to civilization and progress."¹ According to Jones, "In France and Italy, the agriculture of the peasant tenantry is good when compared with similar classes elsewhere, and the soil and climate are, on the whole, excellent; yet the number of non-agriculturists is in France only as 1 to 2, in Italy as 4 to 13, while in England, with an inferior soil and climate (agricultural climate, that is), the non-agriculturists are to the cultivators as 2 to 1." The peasants' rents as distinguished from farmers' rents Jones classified as labour or serf rent, metayer rents, ryot rents, which prevailed in India, and cottier rents, which were peculiar to Ireland. Under the condition of peasant rents which obtain over most places of the earth the agriculturists labour with few tools, which are insufficient to extract a subsistence or mere wage from the soil. They pay rent to the owner, in most

¹ Jones, Richard, *Peasant Rents*, p. 145.

cases the political sovereign of the country; and the amount of the rent depends not on the conditions enumerated by Ricardo but on the nature of the contract or the character of the sovereign.

Under these conditions the general principles would be almost opposite to those of Ricardo. In the case of the Ricardian hypothesis rent is payable when land is limited in quantity and variable in quality. In the early stages of society there would be no rents. Rents begin to be paid only when it becomes necessary to cultivate lands of an inferior degree of fertility. In other words, there is a scarcity of the more fertile land. Furthermore, rent implies that part of the land produces a surplus or more than sufficient to sustain the cultivators, else the farmer will shift to some phase of commerce or manufacture. Again, according to the Ricardian hypothesis, improvements in agriculture would not increase the landholders' rent. They would merely increase the well-being of the other classes, for rent was the difference between the productivity of the best and the marginal land, and improvements in agriculture simply delay the process of resorting to inferior soils on which the payment of rent depended.

Rica

Under the conditions in which peasant rents are found, rents are payments for the right to earn wages or subsistence by working on the land. In the earliest stages of industrial society, when land is abundant in proportion to population, and there are vast tracts of waste or unoccupied land, peasants on land of inferior fertility pay rents as well as those on superior lands. The rent is not determined by differential fertility or nearness to market but by the rapacity and despotism or the moderation, humanity, and foresight of the rulers. Rent would exist if all land were equally fertile. Under the Ricardian system there is conflict of interest between the landlords and the rest of the community. In the case of peasant rents the interests are on the whole identical. Peasant rents may increase from two causes, from the increase of the whole produce, effected by the greater skill, industry, and efficiency of the tenant, or from

an increase of the sovereign's proportion of the produce, the produce itself remaining the same. In the case of the first of these two causes, the typical case, there is no conflict of interest between the rent payer and the rent receiver. Improvements in agricultural production increase the source of both wages and rent. In view of these considerations it is easy to see the historic limitations and relativity of the Ricardian theory of rent. The absence of land rent in the early period of the United States was not so much due to the small population and abundance of land and other resources as to the quality of the government, a representative democracy which made a contract granting practically free land in certain quantity to its citizens, a contrast to the harsh and exacting contracts of the Asiatic despots.

But if Richard Jones and, later, German historical economists have shown the historical relativity of the Ricardian premises, Professor Wesley Clair Mitchell has demonstrated that some of the peculiar features of the Ricardian analysis have a still more limited historical conditioning, having arisen from the conflict of the agricultural and the industrial classes over the "Corn Laws. This has to do particularly with Ricardo's definition of the word "distribution," the proportionate share of the national income that is paid to wage-earners, entrepreneurs, and landlords.

We should notice that Ricardo got his peculiar conception of what the problem of distribution is directly from the parliamentary struggle. "Distribution" is a word of many meanings. You can take the distribution of wealth to refer to the distribution of ownership; how the wealth of the country is divided. Or you can take it to refer to the distribution of income. If you talk about the distribution of income, you may mean the distribution of money income or income in goods, or income in satisfactions. Further, you can treat the distribution of income as concerned with the actual amount of income that different people get (so many dollars or so much goods *per capita*), or as concerned with the proportions in which the total income of the country is divided. If you deal with proportions of income you can study the way in which income is divided among individuals, or the way in which it is divided among the factors of production, or the way in which it is divided among certain classes

of the population. You can also treat the problem of distribution, as some later writers have done, as a problem of finding out why incomes have to be paid for the use of certain factors.

Ricardo does not observe these various forms which the problem may assume. Instead he accepts the issue debated in Parliament as a matter of course. To him the problem of distribution concerns the distribution of income as contrasted with ownership; and within that field primarily the distribution of real income, that is, of goods capable of satisfying wants. He further takes it for granted without discussion that the important question concerns the shares received by the recognized income classes of the country. He does not treat individuals but landlords as one body, profit-makers as a second, and wage-earners as a third.¹

Ricardo's problem of distribution, then, was to discover the forces that determined the proportions of the real national income that were distributed to labourers, employers, and landowners as wages, profits, or rent. This was a simplification of method, since it analysed the problem from the point of view of only three of the factors of economic analysis. The influence of changes in government and social institutions, the influence of money and credit, and the force of invention and improvements in the methods of production were ignored for the nonce. Ricardo at the start assumed a partially static condition; the only changes he postulated were a growth of population and an increased accumulation of capital. From these data he deduced a law of industrial progress, namely, that in an advancing community rent tends to rise, profits to fall, and wages to remain about the same. The basis of this law is Ricardo's theory of rent. And combined with it were his theories of wages and profits. The Ricardian theory of wages was that real wages tend to be substantially constant or tend to approach the subsistence level. This conception of wages was partly based on the Malthusian theory of population and partly a class assumption of the politically powerful opponents of the Corn Law. Both the landlords and industrial leaders thought that wages would approximate the level of subsistence. With competition bringing about an equality of

¹ Mitchell, W. C., Unpublished Manuscript.

profits in different occupations, this law of industrial progress was deduced from the theory of rent. Assuming, then, the growth of population, an increased amount of capital accumulated, and unchanged methods of cultivation, together with the constancy of real wages, there was an increased difficulty in securing the greater amount of food needed because of the fixed quantity of land available. It became necessary to cultivate more land or to work more intensively the lands already under cultivation. This made necessary the resort to land of a lower and lower grade of fertility. Or, if one cultivates the old lands more intensively, the additional outlay will result in a lesser return in proportion to the capital and labour expended.

/ On the poorer lands that are taken into cultivation no rent will be paid. They are the marginal lands which, according to the given market price for grain, will just return the ordinary wages of labour and the interest of capital outlays. On these marginal lands the product that is obtained is divided simply between two classes, the employing farmers and the labourers, and since real wages remain the same, the reduction in the return will fall entirely upon profits. In other words, under the assumed condition, the effect of increasing population and the accumulation of capital is to reduce the share of the employers or capitalists. But since competition equalizes the return to capital in all employments, the smaller share which the agricultural employer receives will be extended from marginal lands in agriculture to other lands in agriculture and to all other industries. Hence increasing population and growth of capital lead to a reduction in profits, or, as we would say, in the interest on capital, and an increase in rent that goes to the landlord. (As the cultivator resorts to poorer and poorer lands, as the margin of cultivation is lowered, the difference between the return paid to the owners of the better lands and the poorest lands in cultivation will grow wider, and it is this difference which constitutes rent.)

The growth of population under the condition of a limited

supply of the better lands brings about a double profit to the landlords, because capital goods are indefinitely reproducible. They can be multiplied without decreasing return per unit of cost. But agricultural products can be multiplied only with increasing difficulty. Hence the resort to poorer lands will cause the price of agricultural products to rise in comparison with the cost of personal services or manufactured goods. Under these circumstances the landlords will reap a double gain. They will get a larger share of produce than the capitalist farmers; and the higher price of agricultural produce will enable them to buy more of other goods on the market.

In qualifying this deductive method Ricardo admits modifications of his simplified analysis. He admits that methods of cultivation have improved. In so far as this is so, when by rotation of crops and by better grades of stock and machinery people can increase their agricultural output on the good lands, they will not have to resort to cultivation of poorer lands or more intensive cultivation by the older method of old lands to obtain the food necessary for an increasing population. Hence inventions and improvements alter the trend of Ricardo's law of industrial progress. Ricardo regards this modification as one of minor importance. Scientifically, it is a question of fact as to the rate of inventions and improvements in proportion to population growth and the accumulation of money for investment. The validity of Ricardo's reasoning depends upon the reality of his assumptions; that wages tend to remain near the subsistence level, that competition secures equality of return to capital in different enterprises, and that methods of agricultural production remain practically constant. To what extent this was true and for what historic periods is a matter for historic investigations.

It has been already pointed out that Richard Jones regarded rent as a matter of historic relativity. Marshall refers to the fact that Ricardo in his analysis confines his attentions to the circumstances of an old country. The fixedness of the whole

of the cultivable land in an old country was, according to Marshall, the main foundation of those great classical discussions. Carey, an American economist, who generalized from familiarity with conditions following the colonial period in America, also reacted against the theories of Ricardo.

Ricardo, then, not only in his theory of rent but in the whole theory of distribution which he deduced from it was generalizing from conditions that prevailed in England for only a few years.

During the period between 1790 and 1820 rent actually doubled, interest was almost doubled, and the wages of labour fell. In fact, according to Toynbee the trend of wages in England had been downward ever since 1750. Before that real wages had increased. "The middle of the eighteenth century was indeed about his (day labourer of England) best time, though a decline soon set in. By 1771 his condition had already been somewhat affected by the lean years immediately preceding, when prices had risen much faster than wages, although the change had as yet, according to Young, merely cut off his superfluous expenditure. By the end of the century men had begun to look back with regret upon this epoch in the history of the agricultural labourer as one of a vanished prosperity."¹ After the turn of the century there had been a series of bad harvests, the country was at war, and Napoleon's Continental Policy had aimed to cut off importations into England from the Continent. The result was that the country had to depend mainly on the food grown at home; and since the harvest on the whole had been poor, the price of wheat had been high. With the rise of prices and rise of rent there had come an increased population. According to Toynbee, before 1751 the largest decennial increase was 3 per cent. For each of the next three decennial periods the increase was 6 per cent; then between 1781 and 1791 it was 9 per cent; between 1791 and 1801, 11 per cent; between 1801 and 1811, 14 per cent; between 1811 and 1821 18 per cent. This is the highest figure ever reached in England, for since 1815 a vast emigration has been

¹ Toynbee, Arnold, *Industrial Revolution*, p. 68.

always tending to moderate it.¹ This peculiar condition of increasing population, rising prices and rents and falling wages was accompanied by an unusual period of high interest and profits.² While population was increasing and prices were rising the time had not yet come for relief or equilibrium through emigration; and for a brief period during the Napoleonic wars and before the development of cheap transportation in the United States there were not available the food supplies from the vast tracts of virgin land in the New World. Ricardo's system of distribution, then, in its main outlines consisted of generalizations on the basis of local and temporary conditions. X

Just why Ricardo should deduce a law of industrial progress which involved rising rents, falling interest and profits, and constant wages from a secular trend which involved rising rents and profits and falling wages is a matter for speculation. He may have made allowance for abnormal war conditions. He may have foreseen a normal period when wages would have to stop falling, when the subsistence wage was reached. And he may have reasoned that war profits were temporary, and that with permanent peace competition would force profits down to the wages of management. Again, the law might be an instance of the rationalization of the business man's point of view, a sort of indirect apology for profiteering. If one complained of the big slice of the national income going to the entrepreneur, the latter could reply that this was only temporary and due to the risk and need of enterprise in war-time. Competition would soon take care of excess profits. The real or long-run recipients of large gains were the idle and privileged landlords. A similar explanation, and one that reflects the pragmatic character of much economics, is given by Professor W. C. Mitchell. X According to this view, the law of industrial progress was a generalization based on a definite historic trend.

¹ Toynbee, Arnold, *Industrial Revolution*, p. 87.

² Ibid., p. 123.

³ Mitchell, W. C., Unpublished Manuscript.

The poor harvests in England and the exclusion of continental grains from England by Napoleon had raised the price of grain in England, had raised rents and reduced the real wages of labourers. The Corn Law struggle was over the price of grain. The landed interests wanted it kept up by further restrictions on the importation of foreign grain, in order to keep up their own rents. The manufacturers wanted cheaper grain, which they thought would mean lower wages, lower cost of production, and an expansion of British trade, because, under these conditions, British manufacturers could compete with the capitalists of Russia, Poland, Austria, Germany, and France, where low wages were conditioned on the low price of wheat. (According to this view of the situation, Ricardo's law of progress is implied to be an economic generalization constructed to support a political policy in the interests of the capitalist-employer class.) The chain of unfortunate circumstances implied in the law could be circumvented by encouraging the importation of grain. In this way Englishmen could avoid the necessity of resorting to poorer soils, reducing profits, and raising rents. The supply of food necessary to support an increasing population could be secured by importing from abroad and paying for these imports with manufactured goods. This explanation, like the preceding one, suggests that Ricardo's theory was immediately practical rather than impersonally scientific. It implies that the Ricardian or orthodox theory of distribution was a theorizing of the business man's, the capitalist-employer's point of view. It was a rationalization of the self-interest of an economic class. Here was a case where the interest of the manufacturer made him a follower of Adam Smith and a believer in free trade.

Ricardo discusses rent chiefly on the basis of two conditions: first, that of the rising price of agricultural products caused by increasing demand and diminishing returns; and second, that of a falling price caused by improvements in agriculture. The first condition, that which obtained during the few years of his greatest economic activity, was the basis of his logical

system. In the second condition, Ricardo's system is subjected to modification. The questions of inventions and improvements brought about confusion in the whole classical analysis. Ricardo and Malthus disagreed as to the effect of agricultural improvements on rent. Ricardo thought that improvements would lead to a fall in rents; and Malthus maintained the opposite. Toynbee believed that Malthus was right. In the words of his illustration, "Take an acre of ground such as we were considering above with an original produce of five bushels of wheat, but which under improved cultivation yields forty bushels. If the price of wheat remains the same, and all the land under cultivation has been improved to an equivalent extent, the rent will now be five shillings (the rent per acre prior to the improvement), multiplied by eight."¹ This to the writer seems an illustration of the fallacious kind of reasoning against which Toynbee on the whole was reacting. If land which formerly yielded five bushels now yields forty bushels, the price will not remain the same because supply will be vastly increased. If the improvement takes place only over a limited area, and the great mass of wheat land were cultivated by the same old method, the profits of the progressive cultivator will be vastly increased. But if the improvement should be rapidly adopted over the whole area of wheat lands which supplied the market, it would seem that a sufficient supply of wheat could be secured from the better lands alone. The margin of cultivation would then be raised, there would be a narrower margin between the productivity of the better lands and the poorer lands that remained in cultivation, and this narrowing margin would represent a diminished rent. The contention that is being maintained here is that inventions and improvements are as real a factor in economic analysis as the mere surface of the earth and routine labour; and hence that Ricardo's generalizations in the field of distribution were too arbitrarily simplified to be permanently valid. From another point of view they were valid for a period of so

¹ Toynbee, Arnold, *Industrial Revolution*, p. 133.

short a time as not to be useful as universal generalizations or even as statements of secular trends over a period of considerable time.

{ Ricardo's assumption that capital and population were increasing, but that all the other economic factors were remaining constant is probably the source of another distinction that has been the basis of much economic thinking, the distinction between statics and dynamics. If one factor is assumed to be dynamic, and all the rest to be static, one can measure the importance of the varying factor by comparing the successive quantities of it with the successive effects in the total economic situation. This method would then correspond to the laboratory method of chemistry, and economics would be an exact science. If one of the three factors, land, capital, and labour, could thus be conceived to be constant, then the two remaining variables would be more amenable to analysis. This deductive method, the isolation or classification of factors, and the assumption of some of them as constant and some as variable is, according to J. N. Keynes,¹ a later expositor and apologist for classicism, an example of scientific method in the case of the social sciences. Since statistical analysis in this field is necessarily inadequate and always more or less out of date, the deductive method is the best substitute for the laboratory method of exact science. In the laboratory the experimenter keeps all of his factors constant but one, and by varying that he determines the quantitative effects of differing combinations.² This same method was more completely elaborated by J. B. Clark, who reasoned consciously from the assumptions and premises which were probably largely unconscious in the case of Ricardo. If there are static conditions, if there is no growth of population, increase in supply of land, change in the volume of money, no new industrial methods or new inventions, if there is private property, and *laissez-faire*, competition will equalize the returns

¹ Keynes, J. N., *Scope and Method of Political Economy*.

² *Ibid.*

from equally productive efforts in all fields; wages, interest, and rent will equal the contribution of labour, capital, and land; and profits will gradually disappear. This is a method of making universal laws out of conditional hypotheses, and is evidently an elaboration of the method of Ricardo.

This method would seem to be valid in so far as the hypotheses correspond to historic facts. If the assumptions correspond to real conditions, the generalizations following would be true as long as the conditions—the historic trend—lasted. To assume metaphysically that some factors are static or constant, or increase at a constant rate, and that others uniformly increase, or increase at a faster rate, this would give one a free hand to prove anything he wanted to; it would be an almost invincible temptation to rationalize. But conformity of assumptions, or “laws of industrial progress” to historic facts, is a scientific check on this propensity. In so far as the development of the main factors took place as formulated, and the remaining factors were constant or of minor significance, the generalization might be accurate enough to explain experience and serve as the basis of policy. But if the ratio of growth of the factors change, the generalization becomes invalid. That is, generalizations based on secular trends cease to be true, if the trend ceases. If the trend is reversed, the generalizations become the opposite of the truth.

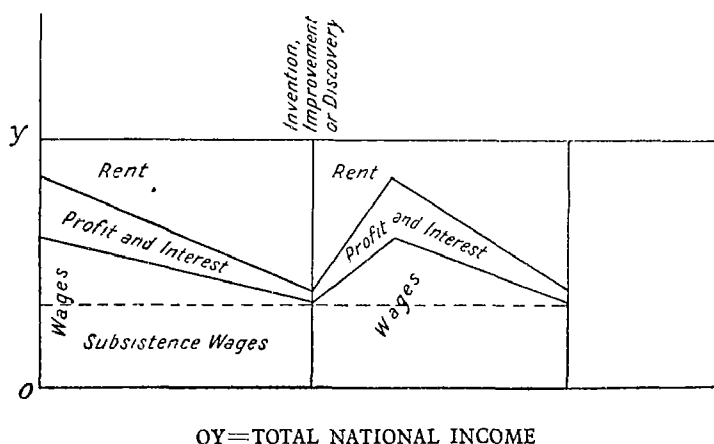
A more scientific approach to the problem of economic laws would seem to be analysis of all the factors that operate in any situation, rather than a few factors even if they are ones of greatest importance. By this method Toynbee attempts a more complete analysis of the causes of rising rent between 1790 and 1830. “The main causes were: 1. Improvements in agriculture, the chief of which were the destruction of the common-field system, rendering possible the rotation of crops, the consolidation of farms with the farmhouse in the centre of the holding, and the introduction of machinery and manures; 2. The great growth of population, stimulated by mechanical

inventions; 3. A series of bad harvests, which raised the price of corn to an unparalleled height; 4. The limitation of supply, the population having to be fed with the produce of England itself, since during the first part of the period all supplies from abroad were cut off by war, and later, higher and higher protective duties were imposed, culminating in the famous Corn Bill of 1815."¹

If one wished to defend the Ricardian economics or to rationalize the method used, it is possible to think of other methods of defence besides the Keynes defence of deduction as a substitute for the laboratory method. The factors which Ricardo assumed to be dynamic are those which follow universal or long-continued secular trends. The tendency for population to increase is, as Malthus pointed out, practically a universal tendency. And the tendency for capital to accumulate as fast or faster than the growth of population has been a secular trend since the beginning of the Industrial Revolution. But inventions Ricardo might have assumed were more or less sporadic and unpredictable. A new and important invention upset the proportion of factors toward which society was tending, which would have been realized in the ultimate form of the stationary state, and which would have rendered realistic the static economic analysis. Historically inventions have been more largely a novel factor. Inventions in industry, it is true, had developed from 1750 to 1800, the period of the great inventions in textile manufacture. Since on the whole, however, inventions were rather exceptional and sporadic, they might be left out of account in the attempt to forecast economic trends. After an invention, the relation of factors is modified, but the Ricardian law of industrial progress or some law based on the assumption that some factors would be static and that others would develop uniformly operates until the period of the next major invention. Hence the justification for economic statics, the idea that certain factors like land remain constant, that others like population and capital

¹ Toynbee, Arnold, *Industrial Revolution*, p. 134.

grow at a fairly uniform rate, and that others like discoveries and inventions are so rare and sporadic as not to be figured in one's calculation, may explain attempts to formulate trends or "laws of industrial progress." This idea may be presented graphically. Since the time of Ricardo, however, the progress of invention and improvement has become as normal a factor as the growth of population and the accumulation of individual



fortunes. Professor Ogburn in his *Social Change* has almost implied a law of the progress of invention as dependable as any of the so-called laws of population growth.

Besides treating Ricardo's method as a species of scientific methodology, other explanations, as given above, are first, that it arose out of attempts to solve the practical problems of the time; and that it represented the business men's bias and limitation of outlook.

Ricardo left school and entered the brokerage office of his father at the age of fourteen. Thereafter his education was gained from the training in judgment and exact calculating of the brokerage business, and his studies in mathematics, chemistry, geology, and mineralogy. His grounding in theoretical economics came from Adam Smith's *Wealth of Nations*

and Malthus' *Essay on the Principles of Population*.¹ Thus, although he had excellent training in some branches of science which require clear thinking and mature judgment, he did not have what is called a liberal education. He was not oriented in history, philosophy, literature, or other forms of fine art. He had the training that gives one the outlook of the practical business man or the financier, but not that of the engineer, the technician, or the humanist. The explanation of Ricardo's system which unifies and enforces the other explanations is that it is the theorizing of the assumptions, the bias, the point of view of the business man, the capitalist-manager of the time, with reference to the specific problems and secular trends of his country and age.

The assumption of natural law was Ricardo's starting-point for his analysis of wages. His general law of wages runs as follows:

The natural price of labour is that price which is necessary to enable labourers, one with another, to subsist and to perpetuate their race, without either increase or diminution.²

There was much evidence in the form of temporary trends and longer historic trends and in the speculation of the time to support this theory. As was pointed out above, wages on the whole declined from 1790 to 1820, although rent had doubled and profits had nearly doubled. The physiocrats had also assumed the natural law of population according to which the wages were kept at a starvation limit. This was based on the circumstances of France in the latter half of the seventeenth century, when few of the labouring class were far from starvation. Marshall has pointed out that the subsistence theory of wages would receive much support from an historical review. In ancient times and in modern times over a large part of the earth, especially the Orient, wages have been near the subsistence or even the starvation level.³ Ricardo did point out that the market price does not always conform to this

¹ Mitchell, W. C., Unpublished Manuscript.

² Cf. Ricardo, *Principles of Political Economy and Taxation*, chapter v.

³ Marshall, *Principles of Economics*, pp. 530, 531.

natural price. The market price may, in an improving society, be above the natural price for some time. For the increase of capital and improvements of industry may cause an increase of economic production faster than the growth of population. Prices may fall and the real wages of labour may be for a time above the level of subsistence. Ricardo himself regarded this as a social advantage. He was keenly sensitive to the importance of a higher standard of living. "The friends of humanity cannot but wish that in all countries the labouring classes should have a taste for comforts and enjoyments, and that they should be stimulated by all legal means in their exertions to procure them. There cannot be a better security against a superabundant population."¹ However, Ricardo assumed that this rise of real wages above the level of subsistence was a temporary phenomenon. The increase in population and the law of supply and demand would tend to force wages back toward the subsistence level. This view was in harmony with Ricardo's own assumptions of the permanent trend of population growth, the limited supply of available land, and the sporadic and unpredictable character of inventions and improvements. The historical verification of this view came from the famous work of his friend Malthus on population. Malthus' *Essay on the Principle of Population* was the second of the great creative works produced by the English school of classical economists. The first was the *Wealth of Nations* in which Adam Smith investigated the causes of wealth. The second one was Malthus' essay on population, published in 1798, which considered not the causes of wealth of the nation as a whole but the causes of poverty of the labouring classes. The third great creative work was Ricardo's *Principles of Economy and Taxation* which appeared in 1817, and in which the author sought to ascertain the laws of the distribution of wealth, and especially the circumstances that determine the proportion of the national wealth that goes to the class of capitalist managers.

The theory of Malthus, as is well known, supported the

¹ Ricardo, *Political Economy and Taxation*, p. 77.

view of the subsistence theory of wages. In his survey of the course of wages in England from the thirteenth to the eighteenth centuries Malthus showed that the mean level had oscillated from century to century, falling to about half a peck of corn a day, and rising sometimes to a peck and a half, or even in the fifteenth century to about two pecks. But he maintained, especially in his first essay, that the trend was toward the subsistence level owing to the characteristic of the labouring class to marry early and have large families, so that a redundant supply of population by the mere working of the law of supply and demand would force wages down to the margin of subsistence. The essay of Malthus, as is well known, was a reaction against the sentimental idealism of his father and William Godwin. Malthus himself was a man of wide learning and realistic temper. He was learned in mathematics, history, poetry, and modern languages, and he reacted against the communism of William Godwin much as a modern sophisticate would react against the intellectually immature idealism of some of his elders. Godwin's theory was that man was by nature perfectible, that mind will one day become omnipotent over matter, that population will, therefore, be held within limits, and that industrial improvements may be the basis for a permanent rise in the standard of comfort and well-being. Malthus' argument that population tends to increase in a geometrical ratio and food tends to increase in an arithmetical ratio, and the lengthy historical researches in support of this hypothesis tended to overthrow the theory of Godwin. It has been pointed out that Malthus himself had no real explanation as to why population increased more rapidly than food. It was not until the time of John Stuart Mill, when the principle of population was related to the doctrine of diminishing returns from agriculture, that Malthus' law was given a theoretical basis. However, the mass of historical evidence in Malthus' essay served to convince his contemporaries of his thesis and tended to justify Ricardo in his assumption of what has been called the "iron law of wages."

The success of Malthus' theory of population caused him to continue research in that topic, so that after five years spent in revising his book he brought out in 1803 a second edition. This had grown to be four times as large as the first edition. In the first edition population was to be kept from outrunning the food supply by two checks, by misery and vice. These together have been termed the positive check. In the second edition the volume of criticism against his first study caused him to introduce a third check which he called the "moral check." This moral check was the idea that men could gradually learn to practice self-control in the matter of procreating. This in effect was a compromise with Godwin. The acquisition of self-control in respect to population growth is merely a limited aspect of Godwin's idea of perfectibility. Malthus' successors have invented a new form of population control in the form of contraception, so that no particular moral virtues are necessary to adjust population to the food supply except the virtues of prudence and calculation. The net effect of all this is to reduce the Malthusian law of population and its economic corollary, "iron law of wages," to the status of historic relativity and contingency. The Malthusian law becomes the universal application of an historic contingency. To be phrased scientifically it should not be, "Population tends to increase faster than the food supply, and therefore wages are kept at a subsistence level"; but, "if and when population does increase faster than the food supply, wages do tend toward the subsistence level." But if and when the food supply increases faster than the growth of population, real wages will tend to rise; and the vital social problem will be, not what was called the Malthusian problem, but the present problem of marketing surplus agricultural commodities. ✎

It seems, then, even from contemporary evidence that Ricardo had the choice of two theories of wages, the subsistence theory and the standard of living theory. The weight of contemporary scholarly evidence was in favour of the subsistence theory; although there was plenty of contemporary evidence if one

had been predisposed to accept it, in favour of the theory of rising wages. It is only a hypothesis that Ricardo's identification with the employing and capitalist class was one of the reasons for accepting the conclusions of Malthus' first essay and adopting practically the principle of the "iron law of wages." Marshall points out that Ricardo says distinctly in Chapter v that the natural price of labour in food and necessities is not absolutely fixed; but he does not take the trouble to repeat it constantly.¹ Since, however, he did repeat constantly the idea that wages tend toward the subsistence level, that may be accepted as his characteristic view.

Professor Mitchell, following the method suggested by John Neville Keynes, argues that Ricardo assumed the subsistence theory of wages as a quasi-scientific or laboratory method. Trying to determine economic laws by the relation of three factors, rent, wages, and profits, he has to assume that only one of them is variable. Rent has been already reduced to a constant trend. There are two theories of wages available. One of them, based on the first essay of Malthus, makes it a constant; the second, based on the second essay of Malthus, makes wages a variable. Ricardo assumes a theory based on the first essay of Malthus because of the exigency of his analytical method. When he is discussing problems, he has to dispose of one of these quantities as a constant. This looks a little like changing the facts to suit your formula. By the same method one might justify the Malthusian law of population because a man trained in mathematics has in mind the distinction between arithmetic and geometric progression; and when he turns his attention to social questions he achieves a synthesis of mathematics and sociology. But, of course, the influence of Malthus was due to a greater achievement than this—his integration of mathematics, sociology, and history. To the writer of this study the argument of Keynes seems like a brilliant if unconscious rationalization.

¹ Ricardo, *Political Economy and Taxation*, p. 508.

Ricardo's acceptance of the subsistence theory of wages was also in harmony with his view of the inverse relation of wages and profits. His idea was that wages and profits together constituted the cost of production, and so under conditions of free competition determined market price, rent being considered an effect and not a cause of price. Since these two distributive shares together constituted market price, a decrease of one meant an increase in the other, and vice versa. Hence the philosophic grounds for the opposition of employer and employee, and the practical policy of attempting to increase profits by forcing down wages. Of course, when Ricardo stated that profits rise only when wages fall, he was speaking of ratios or proportions and not of absolute amounts. And the cause of increased profits might not always be decreased wages. It might be due to improvements in the mode of production, of which the employer received a larger share of the benefit. "It is not by the absolute quantity of produce obtained by either class (landlord, capitalist, and labourer), that we can correctly judge of the rate of profit, rent, and wages, but by the quantity of labour required to obtain that produce. By improvements in machinery and agriculture the whole produce may be doubled; but if wages, rent, and profit be also doubled, these then will bear the same proportions to one another as before, and neither could be said to have relatively varied. But if wages partook not of the whole of this increase; if they, instead of being doubled, were only increased one-half; if rent, instead of being doubled, were only increased three-fourths, and the remaining increase went to profit, it would, I apprehend, be correct for me to say that rent and wages had fallen while profits had risen; for if we had an invariable standard by which to measure the value of this produce, we should find that a less value had fallen to the class of labourers and landlords, and a greater to the class of capitalists, than had been given before."¹ Ricardo gives an illustration of this change in the proportion of the whole produce that goes to

¹ Ricardo, *Political Economy and Taxation*, chapter i, sec. vii, pp. 41, 42.

the different classes. "Of every hundred hats, coats, and quarters of corn produced, if

The labourers had before	..	..	25
The landlords	..	..	25
The capitalists	..	..	50
			<hr/>
			100

And if, after these commodities were doubled the quantity, of every 100

The labourers had only	..	..	22
The landlords	..	..	22
And the capitalists	..	..	56
			<hr/>
			100

In that case I should say, that wages and rent had fallen and profits risen."¹ On this relative standard wages and rent are said to have fallen, although for every 25 hats, coats, and quarters of corn which the labourer and landlord received they now get 44. By the relative standard wages and rent are now 22/25th of what they were, and profits 56/50th. In an absolute commodity standard wages and rent are now 44/25th of what they were, and profits are 56/25ths. By a similar line of reasoning, if general wages advanced from \$1,500 a year to \$2,500, the price level remaining the same, and rent and profits more than doubled, we would be justified in saying that wages had fallen. In this method of reasoning progress is to be measured not by any absolute standard of well-being, but by the relative gain of one group or class over another. The justification of it must rest on the validity of confining the term "value" to exchange value and not to use value, and the validity of the conception of the term "distribution" to the share of the national income going to classes and not to individuals.

The assumption is that value is a sort of ratio of exchange between the services of different economic classes treated as

¹ Ricardo, *Political Economy and Taxation*, chapter i, sec. vii, p. 42.

distinct units. A modern behaviouristic psychologist, who holds that nations and social classes are fictions, would probably say that this relative gain or loss was purely fictitious. If individual biological organisms and personal consciousnesses are the realities, the psychic units, they should be treated as the units in the welfare analysis. On this basis an increase of hats, coats, and food in the ratio of 44 to 25 to the individual labourer would doubtless be accepted by him as increased prosperity or economic welfare, although as a competitive social being he might lose rank relatively to men of other groups.

Now why did Ricardo hold this peculiar theory of value? If from the standpoint of modern realistic psychology value in the Ricardian sense is a fiction, yet fictions historically have had their uses; they have served as forms of "useful error." Fictions are the principles by which most men live. And from another point of view they are the instruments by which aggressive individuals secure favourable laws or public policies by means of which they can secure absolute or relative increases of economic goods or social power. The corn-law controversy, as discussed above, developed into a class struggle between the landlords and the industrialists for the balance of wealth and power. By representing value as the proportion of the total national income that went to each of the three classes, or as the ratio of exchange between the three classes; and, at the same time, by developing his law of industrial progress, Ricardo very plainly suggested that if the nation wished to avoid this chain of unfortunate circumstances it would have to adopt a public policy that would reverse the trend implied in the "law," encourage the importation of grain, and so let the industrialists prevail over the landlords.

This method of Ricardo appears, then, as a rather elaborate rationalization of the interest of the class to which Ricardo himself belonged. Yet, in a sense, this type of rationalization was also problem-solving thought; for the growth of population in Great Britain, the possession of coal and iron, the

rise of colonies and other frontier commonwealths, and other world conditions gave the English a comparative advantage in manufacturing and the carrying trades. So the theorizing of Ricardo, although a rationalization of class interest, tended also, probably, to further the economic interests of the people as a whole, not only in Great Britain but in the colonies and other frontier countries. The rise of the industrial class was in harmony with the public interest. And the rationalization of the rise of a class which is in the general interest is a useful or, from the pragmatic point of view, a "true" social science. X

The above illustration may explain why "value" as used by Ricardo is a matter of the rate of exchange as between three broad social classes. It was a theorizing of an historical controversy, a temporary political alignment. And, of course, it was in harmony with his labour theory of value. If the entrepreneurs as a class could hire more labour than before with their profits, then the "value" of entrepreneurship had increased. But there is another question involved in Ricardo's formula; why did he confine value to the rate of exchange and not to value in use, or to absolute standards in the quantity of consumers' goods? In other words, if, because of inventions or improvements in agriculture, the total of consumers' goods should double, and each of the three classes, or in general, every individual, should receive twice as much economic goods in terms of physical quantity, why should they not say that value had doubled; or, if allowance is made for a diminishing utility, why not say at least that value had increased? This question perhaps brings one to a dilemma that applies to much present-day economic thought. Consumption or value in use is said to be the end of production. Yet after this initial statement the studies of production, exchange, and distribution, which comprise most of the work, all rest on the assumption that value is power of exchange, is a matter of ratios and not of absolute amounts available for consumption. E

This question also may be answered by history. In the independent subsistence economy, like the manorial system

and the frontier family, where there is no exchange, there can be no exchange value. Value is utility for use. But with the rise of free towns and the growth of crafts, specialization and exchange began. When this takes place, when each individual is producing as much as he can of one commodity, how will it come about that the total supply of all specific commodities will be in proportion to the wants and wishes of mankind? Of course, in the case of the independent frontier family this problem is easily met. There is central planning and control by the patriarch. Capital and labour are devoted to producing different kinds of food or to providing housing and clothing in proportion to the parents' estimate of the family needs for these things. Capital and labour are so applied to different objects that equal value in use is secured from equal marginal "doses" in the different fields of application. Moreover, there is a proportional distribution of effort between the creation of consumers' goods and capital goods, such as building barns and building a house, planting a garden or cutting down a forest or clearing rocks off a meadow, planting corn or digging ditches and making public roads. Under these conditions there is little danger of over-accumulation of capital, of the over-production of capital equipment.¹ Also under these conditions it is probable that there was some sort of harmony or proportion between economic and non-economic activities. The patriarch or the parents could decide from the point of view of family needs and wants whether to work or to go hunting, fishing, on picnics, or to church. The capital goods, the consumers' goods, and the holidays were owned and consumed and enjoyed by the same persons. Conformity to Davenport's law of proportion was achieved through a miniature central planning and control. However, this system, which achieved proportion, according to the potentialities of a local environment and primitive technology, did not produce abundance. It lacked the productivity of later days due to geographical

¹ Moulton, H. G., "Commercial Banking and Capital Formation," *Journal of Political Economy*, vol. xxvi, 1918.

specialization, the personal division of labour, and the machine technology. If there was an absolute shortage of food, only plain clothing and rude shelter, long, arduous labour, and little of the amenities of civilization, there was not sufficient compensation in the fact that there was a proportional scarcity of all goods and so a minimum of privation. The social need was for increased production. So the expansion of world trade, the rise of the factory system, exchange through the medium of money, were developments in the effort to satisfy pressing needs.

With the beginning of specialization and exchange in the local economy of the early Middle Ages, the canonist system, the regulation of industry by priests and guild masters, was in the nature of an extension of the patriarchal or family or manorial system. Regulation was attempted through a sort of socio-religious extension of the primitive communism of the family or the aristocratic community of the manor. In place of central planning with the identity of producer and consumer, there is the principle of just price. There is a transition to the price system. Later, with the widening of the market, the expansion of trade, and the growing complexity of economic life, governmental or paternal regulation tends to break down, and to be replaced by free competition and the money market. Adam Smith was the interpreter or prophet of this new system. The price system is simply a new and presumably a more effective method of achieving regulation. Competitive prices are the new social institution for achieving regulation, as were patriarchal planning and just price under simple conditions.

Perhaps at this point it may be advisable to define the term "regulation of industry." Regulation is achieved when there is a smooth and orderly flow of goods from producer to consumer, when there are neither booms nor depressions; when capital and labour are so distributed that the different kinds of commodities and services will be available to the consumer in proportion to human needs or wants, or, in other words, when the marginal intensity of wants for all kinds of goods

will be equal; when there will be neither over-accumulation nor deficiency of capital; when profits of equally efficient entrepreneurs are the same in all industries; and when the same real wages, considering the total advantages and disadvantages—the equalizing conditions, are paid in all industries to workmen of equal skill and industriousness. Market price in this sense is a social, ethical institution, like family plans and just price. By market price, or better, by natural price, to which market price is tending, there is identified, as in the doctrine of Adam Smith, the Providence of God and the self-interest of individual men.

(Ricardo presented the same system from the point of view of distribution. The individualistic economy is assumed as the natural order. But individuals work in the dark as to what other individuals are doing. How is proportionality in supplying consumer's needs to be attained under this system? High price, relatively, is the instrument of inducement. Low price, relatively, is the instrument of restriction. Ricardo's own words present this clearly. "In the ordinary course of events, there is no commodity which continues for any length of time to be supplied precisely in that degree of abundance which the wants and wishes of mankind require, and therefore there is none which is not subject to accidental and temporary variations of price." "It is only in consequence of such variations, that capital is apportioned precisely, in the requisite abundance and no more, to the production of the different commodities which happen to be in demand. With the rise or fall of price, profits are elevated above or depressed below their general level, and capital is either encouraged to enter into, or is warned to depart from the particular employment in which the variation has taken place."

"Whilst every man is free to employ his capital where he pleases, he will naturally seek for it that employment which is most advantageous") (in which the output relatively to demand is scarcest), "he will naturally be dissatisfied with a profit of 10 per cent, if by removing his capital he can obtain a profit

of 15 per cent. This restless desire on the part of all employers of stock, to quit a less profitable for a more advantageous business, has a strong tendency to equalize the rate of profits of all, or to fix them in such proportions as may in the estimation of the parties, compensate for any advantage which one may have, or may appear to have over the others."¹

In other words, assuming the free individual economy and the price system, the entrepreneur takes the place of the father of the family in the frontier economy, of the priest and guild master in the early Middle Ages. He achieves or tends to achieve proportionality in the supply of consumers' goods, and the measuring rod he uses is profit. Profit is the individual, conscious end, but maximum social utility from consumption is the unconsciously sought but actually realized good. The specific social conditions under which these conscious and unconscious ends are harmonized will be discussed later on in this book.

Another classical theory in the field of distribution which might be called an unconscious rationalization of the employing class, or which at least had the same practical effect, was the wage-fund theory. The authorship of this is ascribed by Toynbee to Malthus, although the material for this doctrine, as has been shown by Professor Taussig, was supplied by all the classical economists from Adam Smith to J. S. Mill. According to this theory, there is at any given time a sum of wealth which is unconditionally devoted to the payment of wages of labour. This sum is not unalterable, since it may be augmented by saving, and it increases with the progress of wealth; but at any given moment it is a predetermined amount. More than that amount it is assumed that the wage-earning class cannot possibly divide among themselves. Thus the sum of wages being fixed, the wages of each one depend solely on the divisor, the number of participants. According to this theory, the wage-earning class could not improve their condition by organizing themselves into trade unions. In a

¹ Ricardo, *Political Economy and Taxation*, chapter iv.

particular trade the workmen might obtain a rise of wages through combination, but this could be only at the expense of wage reductions for workmen in other trades. It was also argued that workmen could not in the long run increase the fund out of which wages were paid. Capital might be increased by saving, and, if this saving was more rapid than the increase in the number of labourers, wages would rise. Savings, however, were not effected by the labour unions but through the abstinence of the capitalist and employing class. The only remedy for low wages that was in the power of the labourers was a limitation of numbers. The rate of wages, it was held, depended entirely upon the efficacy of the checks to population.

This theory later economists have rejected as invalid, although Professor Taussig has shown that it contains an element of truth.¹ It is a sound principle of production economics falsely theorized into a theory of distribution. In the words of Professor Taussig, "the wages fund doctrine, or what there is of truth in it, has to do rather with production than with distribution. It serves to describe the process by which the real income of the community emerges from a prolonged process of production."² The wages fund theory is thus a phase of the production principle of the accumulation of capital. This principle which could be universalized out of historical contingency might be phrased as follows: In periods of important inventions and rapid development of industrial methods, and especially of the substitution of larger and more expensive machines for simpler and less expensive machines, and when the investment fund out of which may come the plant for manufacturing and improving these machines is provided only through the savings of individual men, there may be times when accumulation of money may lag behind invention and hence slow up the industrial use of improved capital! Under these conditions an increase in the investment fund may contribute greatly to the general productivity of industry. The so-called wages fund in this sense would make

¹ Taussig, F. W., *Wages and Capital*.

² *Ibid.*, p. 322.

possible an increase of wages; but, as Professor Taussig has pointed out, it would equally contribute to all the other distributive shares, for it would increase the possible source of wages, profits, rent, taxes, and all other shares into which the income of the community could be divided. In so far as the accumulation of capital, or the so-called wages fund, contributes to increased production, this would be true in any form of social organization, socialistic or communistic as well as individualistic. The fact that, in the words of Professor Taussig, the element of truth in the old doctrine has to do with production rather than with distribution is in harmony with the conclusion of this study that the classical economists in the field of production made contributions that are permanently valid, but that their generalizations in the field of distribution were rather of historical significance and were true only within local limits and for a relatively short historic period.

From the above analysis it would seem that the wages fund doctrine might almost be taken as an example of the rationalization of class prejudice. Even a political economist like Professor Cairnes, who was not identified with the employing class as was Ricardo, and who entertained a strong moral disapproval of the idle and luxurious rich, could not emancipate himself from the traditional habits of thought. In his view labour unions are futile, and the limitations of numbers is the circumstance on which any improvement of a permanent kind in the labourer's condition turns. This supposition Cairnes candidly admits is Utopian.¹

The classical attitude toward labour may be summed up somewhat as follows. The employing class make high profits when wages are low. The prospects of higher wages in the future or for progress in the working class are from present high profits of the employers, for out of these high profits come the accumulation of capital and the increase in the wages fund. The only way for the working class to raise wages is

¹ Cairnes, *Political Economy*, p. 177, note.

to restrict the growth of population to a rate slower than that of the accumulation of capital. This they could not be expected to do. They could not improve their condition by self-organization; they should not be aided positively by the government; and it is Utopian to expect them to limit their own numbers. The only hope for economic progress is through the expansion and success of the capitalist-manager class. The net result of this line of reasoning was an economic philosophy in harmony with the interests and attitudes of the employers.

One of the orthodox classical economists, Professor Cairnes experienced at one time an emotional revulsion against the Ricardian tendency to identify social welfare with employers' profits, although he saw no escape from the logic of classicism. "The whole problem of industry is looked at exclusively from the capitalists' point of view. The advantages we derive from our coal beds and iron mines are the advantages which capitalists derive from them. 'British trade' means capitalists' profits; and, as the only cost taken account of in production is the capitalists' cost, so naturally the capitalists' remuneration is the only remuneration thought worth attending to. Hence high wages are represented as 'neutralizing' industrial advantages, as if nothing were gained which did not come to the capitalists' maw; and the liberal remuneration of the working people is deplored as a national calamity because it sets limits to the capitalists' share in the produce of their joint exertions."¹

Ricardo held a rather curious view as to the secular trend of profits. His law of industrial progress was that in the long run rent tends to rise, wages to remain approximately constant, and profits to fall. Ricardo's view of profits differs from that of modern economists who distinguish profits from interest. Since the business manager in the days of Ricardo was typically the owner of the plant and machinery which he supervised, Ricardo did not make the modern distinction between interest and profits. Profits to him meant the normal return of the acting manager-owner.

¹ Cairnes, *Political Economy*, p. 56.

In the Ricardian analysis of distribution, profits were the residual element. Rent was determined by the differences in productivity between the natural sites in use. Wages, determined in the short run by the ratio of capital to population, were fixed over longer periods, and according to the Malthusian law by the price of food that was necessary to maintain the labourers. The profit-taker received the rest, profits meaning the residual amount that went to the managers of industry. In the long run profits would be determined by the rate of accumulation and the disposition of capitalists to accept a larger or smaller reward. Profits was the amount that did not go to wages and rent.

Perhaps this theory of profits can be made clearer in contrast to the modern theory of profits. If the economists who reason by the Ricardian method reduce the other factors, such as wages and rent, to constants, they have left at least three variable major factors—the rate of interest, the rate and scope of invention, and profits. Interest is the distributive share of the owner of capital, who, for the sake of logic, is assumed to be as idle as Ricardo's landlord. Under these circumstances the men who own and accumulate capital and the active managers of industry are logically in different classes with opposed interests. The rate of interest is determined by the demand for and the supply of money funds. The demand for money is determined by the number and importance of the new inventions and improvements, which necessitate the scrapping of old plants and the borrowing of funds to purchase the new plant, and the larger, more complicated, more efficient and more expensive machines. The supply of investment funds is due to the disposition of capitalists to save rather than spend for luxurious consumption, or in other words to the classical virtues of parsimony. Profits to the business man are large when great inventions are being made and there is a rapid accumulation of capital. Inventions are cost-reducing devices. By adoption of these devices, cost of production is lowered. Since, however, these improvements are not all adopted at the

same time by business managers, there result temporary differentials in the cost of production. Priority in the adoption of improvements gives advantageous differentials in cost to the men who first introduce the new machines. Market price, however, continues to coincide with the cost of production of the more routine and conservative managers. Hence profits in the modern term are the rewards of foresight and initiative in adopting industrial improvements. If during a period of important invention the rate of accumulation is relatively slow, demand for capital will exceed supply, and a large part of the return due to the introduction of improvements will go to the capitalist class in the form of a higher rate of interest on loanable funds. The mode in which the gain shall be divided depends, in the words of Professor Taussig, on the conditions of supply for business capacity and investors' savings. If savings, and so the command of capital, are abundantly put at the business man's disposal, a larger share goes to his profits. If, on the other hand, a great number of capable business aspirants bid for the savings, a larger share goes to interest. If both capital and business power are plentiful, wages tend to rise; the incomes of the possessing class on the whole tend to become less, and the inequalities of wealth are by so much mitigated.¹

The point to be noted in Ricardo's analysis of profits is that business capacity and investors' savings came typically from the same social economic class, and hence were treated as a single economic factor. The Industrial Revolution brought about conditions of suddenly increased demand for business capacity and investors' savings. Since under such circumstances it takes a long period, sometimes centuries, for supply to catch up with demand, especially since volume of demand continues to expand throughout the new industrial movement, the factor, business ability and command of capital, becomes the relatively deficient, the expansible factor in view of the total historic circumstances. Economic "laws," or what the classical econo-

¹ Taussig, F. W., *Principles of Economics*, vol. ii, p. 191.

mists thought of as a natural trend of events, gave a greater economic reward to the class who were engaged in enlarging the deficient and expansible factor, and who were thus, "as by an unseen hand," working toward the end of an optimum proportion of factors according to the potentialities of the time. This greater economic reward in time brought with it political power, and led, as Mitchell has pointed out, to political control through the purchase of seats in Parliament. The same conditions made popular the type of economic analysis represented by Ricardo. A work like Ricardo's in the twentieth century might have a less enthusiastic reception. In fact, the writer of this study is inclined to believe that a work like Malthus' *Principles of Political Economy* would be more useful at the present time than Ricardo's *Principles of Political Economy and Taxation*.

Ricardo in his theory of profits agrees with the modern economists that introducing machinery in industry, machinery which reduces the cost of making and distributing goods to consumers, has the effect of increasing the employer's profits. For the time being, according to Ricardo, the reduction of the cost of food will raise the labourer's standard of living. But this will be temporary, because, according to the Malthusian theory, a rise of real wages leads to an increase in the numbers of the working class and forces wages down again to the old standard of living; so, with rent and wages reduced to comparative constants, the advantage of industrial improvements goes to the employing class. This again is an example of the business man's outlook. It would seem that the inventor and engineer should come in for a share of the credit for industrial improvements. But his contribution is assumed, which is quite natural in the case of people who are thinking and writing about that phase of the process to which they themselves contribute. In line with this same attitude was the assumption or group of assumptions underlying the law of industrial progress, that normally population tended to increase, capital accumulation and business ability tended to increase,

but that inventions were sporadic and unpredictable. The assumption that profits tended to decline was, then, in line with Ricardo's static analysis, his quasi-scientific method, or, if one prefers, his rationalization of a personal interest point of view. For a universal formulation inventions will probably have to be treated as dynamic, as well as every other factor in economic analysis.

Professor Spann has suggested another reason for Ricardo's conception of the secular trend of profits. The division of labour, as was pointed out by Adam Smith, greatly facilitated efficiency and production and a fall in price. Since the division of labour was applicable to manufacture rather than to agriculture, the result was a more rapid fall in the relative price of manufactured than agricultural products, a higher exchange rate of agricultural products for manufactured products. Since competition tended to equalize profits in all industries this differential advantage of agriculture resulted in a secular trend of the rise in rents. And since land was limited in quality, but business ability could be expected to increase with the growth of population, profits, in the long run, might be expected to fall at the same time that rents were expected to rise. As a matter of fact the rate of interest in Europe had fallen during the five preceding centuries, in consequence of the fact that "economy had in general prevailed over luxury." At the time Ricardo wrote his famous work both profits and interest were high, as could be expected at the termination of a great war. Ricardo's theory of secular trends might be interpreted as a statement that the public need have no fear of profiteering, that the grand old principle of natural liberty would work out in the public interest in the long run and that the only recipients of unearned gains who might deserve critical investigation by the public was the idle landlord class.

From the above it would appear that the classical economists, and especially Ricardo, ~~were conservatives~~. There are, however, two sides to the view of the relations of the classical economists to conservatism and liberalism. If one emphasizes the element

of rationalization, he will emphasize the conservative aspect of their doctrine. But if he thinks of the classical doctrines in relation to the conditions of the time he may put more stress on the liberal aspect. Some of our most distinguished economists have emphasized the essentially liberal character of the English classical economists. Marshall defends them against those employers and politicians, their successors, who used their theories as justification for harsh measures. "Some harsh employers and politicians defending exclusive class privileges early in the last century, found it convenient to claim the authority of political economy on their side; and they often spoke of themselves as economists."

"The fact is that nearly all the founders of modern economics were men of gentle and sympathetic temper, touched with the enthusiasm of humanity. They cared little for wealth for themselves; they cared much for its wide diffusion among the masses of the people. They opposed anti-social monopolies however powerful. In their several generations they supported the movement against the class legislation which denied to trade unions privileges that were open to associations of employers; or they worked for a remedy against the poison which the old Poor Law was instilling into the hearts and homes of the agricultural and other labourers who claimed to speak in their name. They were without exception devoted to the doctrine that the well-being of the whole people should be the ultimate goal of all the private effort and all public policy."¹

So much for Marshall's opinion of the classical economists as a group. Among these it is customary to think of Ricardo as the most conservative; but Professor Mitchell has given much evidence of the liberalism of Ricardo both as a man and a thinker. Ricardo was exceptionally successful in business, in economic theory, and in politics. He was a member of a group called the Philosophical Radicals, who were then regarded by the mass of the public somewhat as John Dewey and Bertrand

¹ Marshall, *Principles of Economics*, p. 46.

Russell are to-day, a group which included James Mill, the father of J. S. Mill, Jeremy Bentham, Francis Place, Sir Samuel Romilly, and other influential men of the time. The Philosophical Radicals developed a whole group of social sciences, from economics to phrenology and education, which called for a whole series of social reforms—reforms in law, education, the economic policy of the government, the removal of disability upon dissenters, and the disestablishment of the church. Among these reformers Ricardo was prominent. In the words of Mitchell: "In comparison with the overwhelming majority in Parliament, Ricardo was a person who wanted to change all sorts of social institutions; and he had the Englishman's fine disregard of opposition when it came to matters of numbers, being always ready to incur whatever odium would follow the championship of a cause which he thought was right. Thus he was one of the most eager advocates for parliamentary reform, for freedom of the Press, for the right of public meeting, for Catholic emancipation, and for a levy on capital to pay a war debt."¹ What neutralized the liberalism of the classical movement was the attitude of the economists toward labour; but even here, as Toynbee pointed out, the realization of the conditions that the classicist assumed would have made for the betterment of the condition of labour. The classicists assumed that mobility of labour would have meant equality of wages, and hence economic justice as between different workmen. Yet, according to Toynbee, there was often great inequality of wages within the same county. Adam Smith supplied the explanation of these inequalities. His law pretended to exactness only "when society is left to the natural course of things." This was impossible when natural tendencies were diverted by legal restrictions on the movement of labour, such as the law of settlement, which resulted in confining every labourer to his own parish.² In labouring to remove these "artificial" restrictions and to establish the "natural" freedom

¹ Mitchell, W. C., Unpublished Manuscript.

² Toynbee, Arnold, *Industrial Revolution*, p. 70.

of labourers to follow their own economic interest, the classical economists were working for both the freedom and the economic betterment of the wage-earning classes.)

The author of this study, however, is inclined to believe that there was a large element of conservatism in the classical political economy, especially in the economics of Ricardo. It would seem that the production economics of the classicists was predominantly liberal, and also, as was argued before, permanently valid or embodying substantial contributions to a system of economic generalizations that are universally useful. Hence the outstanding liberalism of Adam Smith. The classical theory of distribution, however, and especially the writings of Ricardo, contain a large element of conservatism.

The economics of Ricardo which embodied his mere acceptance of the classical tradition was of course liberal. These included the theory of the relation of capital accumulation to progress, the idea of the passive and unearned nature of rent. That is, in respect to the economics written with regard to the contribution of the capitalist manager, Ricardo was liberal. In that phase of economics that dealt with labour and labour problems Ricardo was primarily conservative. By conservative the author means the following: A conservative is one who believes that the conditions of a worth-while life are possible only to a few, who places different valuations on different economic classes, and who holds that the working class or the lower classes are by nature inferior, and have their place in the total social economy as instruments or means rather than ends. The liberal believes that class distinctions are in the nature of fictions, that the so-called lower classes have potentialities equal possibly to those of the upper classes, and that economic progress will make possible a participation by ever-increasing numbers in the conditions of a worth-while life. The author believes that while Ricardo was personally a liberal, that while he was amiable, public-spirited, and humanitarian in sympathy, that while he was progressive in politics, at the same time the fact that he was conditioned by his early

and successful business activities and did not receive the broadening effects of university training in literature, philosophy, and history, the net effect of his theory of distribution was to justify the social classes that were being evolved out of the trend of Industrial Revolution. Malthusianism, the iron law of wages and the wages fund doctrine, were the theories in the field of distribution which denied to the working class the hope of increasing participation in the conditions of a worthwhile life. This may justify our characterization of the classical theory of value and distribution as a conservative economics. Yet we would have to stress this aspect of the subject much more strongly than the author is inclined before he would accept the attitude of Toynbee: "Assailed for two generations, as an insult to the simple piety of human affection, the political economy of Ricardo is at last rejected as an intellectual imposture. The obstinate, blind repulsion of the labourer is approved by the professor."¹

Perhaps it would be nearer the truth to say that the evolution of classical economics, corresponding to its shift in emphasis from production to value and distribution, was a trend from liberalism toward conservatism. This trend may be illustrated in the changing conception of natural laws and in the changing view of the relations of economics and ethics. Natural law in the case of Adam Smith was based on the natural rights conception of John Locke. Ownership of property was a natural right based on the creative powers of labour. This natural right, as we have pointed out before, was a democratic, liberal assumption, one which would justify the aspirations of a rising, unprivileged class. In the case of Ricardo and Malthus the idea of natural right took a different turn. It now became a prop of conservatism. It seemed to carry with it a sort of justification of the existing constitution of society as something inevitable. The basis of property ownership that was emphasized became parsimony and accumulation of capital rather than creative labour. Capital accumulation, under this indi-

¹ Toynbee, Arnold, *Industrial Revolution*, p. 1.

vidualistic system, was fostered by inequality. Inequality and individual wealth were promoted by inheritance. When inheritance became increasingly a matter of wealth acquired in manufacture and trade rather than wealth inherited in the form of land and aristocratic privileges, there was a more favourable attitude toward the institution of inheritance. Economists then came to emphasize the natural right to property acquired through inheritance and abstinence rather than the natural rights based upon creative labour.

Even the labour theory of value, which in the hands of Adam Smith was largely a rationalization of the rising artisan class in contrast to the nobility, came to be interpreted by Ricardo in harmony with the theory of employer's cost. According to Davenport, the "determinant of the expense cost of the employer is the labour pain cost of the employees. Fundamentally (originally) it is an employee cost doctrine and not an entrepreneur doctrine—or rather, it finds in the pain cost of the employee the cause of the money cost of the employer. So, for example, the great economist Ricardo held that the relative prices of products are due to the relative amounts of labour involved in their production. But he was not the less emphatic in his insistence that prices were proportionate to the costs of the employer; this was very clear to him. But these employer costs were in turn proportionate to the employees' labour burdens. Thus the relative amounts of labour determined the relative expenses of the employers, and these relative expenses determined in turn the relative prices; whence it followed that the labour cost was the ultimate determinate of the market price."¹ The pecuniary order described by Davenport, as will be developed later, is an aristocratic order, and the theoretic justification of it, a type of conservative economic theory, in contrast to liberal labour value theory of John Locke and Adam Smith.

Another phase of the conservative definition of natural law is that in the case of Ricardo as opposed to Adam Smith the

¹ Davenport, *Economics of Enterprise*, pp. 106, 107.

idea of natural law was derived from Malthus rather than from Locke, and was based on "natural" wages, the standard of living, and the principle of population rather than the "natural" right to own that with which man had mixed his labour.

Closely related to this changing attitude toward natural law is the changing notion of the relation between economics and ethics. The liberal conception of the economic aspect of ethics is that of justice, of absolute equality in the case of the communists or extreme socialists, and relative proportional equality in the case of Locke, Adam Smith, and the more moderate liberals. The labour theory of natural rights was a moderate equalitarian theory. The natural rights view of Ricardo, stressing the accumulation of capital and the subsistence principle of wages, was the opposite of an equalitarian theory; it was a new type of aristocracy. Allied with this movement away from equalitarianism was the rise of pessimism. The theory of distribution, if based on the *Second Essay on Population* by Malthus, as was pointed out above, might have been used as a basis for an economic optimism, like that of the French economist, Bastiat; but the economists and business men, who followed the tradition of Ricardo, accepted the conclusions of the first essay on population. As time went on, economists, such as Cairnes, Keynes, and Bagehot, contended that economics and ethics were separate and independent sciences. In the days of Adam Smith there was no conflict between economics and ethics. Free trade and the division of labour could increase the national income; the social instincts (sympathy, as in the *Theory of the Moral Sentiments*) would not interpose obstacles to rising wages; and acceptance of the philosophy of Locke would insure one a natural right in the products of his own labour. This trend in classical economics from the left to the right may be explicable by the theory of economics as a rationalization of so-called class attitudes. Early classicism has been explained as the rationalization of the revolt of a rising, unprivileged class against the domination of an hereditary, privileged, or leisure class. By the time of

Ricardo the middle industrial class had achieved economic and industrial power. A liberal attitude is that of a lower class seeking to participate in the opportunities and privileges of a higher class. Conservatism is the attitude of a privileged or successful group toward lower or less successful classes. Conservative theory is a rationalization of the desire to retain exclusive privileges. Hence the shifting alignment of social classes may explain the break in the tradition from Locke to Malthus, Ricardo, and the other pessimists; and may help to account for the indifference of orthodox economists to the rise of trade unions and the early phases of the English labour movement.

Among the physiocrats and the classical economists there developed the idea of political economy as a science. The idea of natural law and other economic generalizations furnished the idea of orderly processes out of which were developed the concepts of invariable laws. On the basis of these laws, men made an effort to found the science of political economy. Doubtless one source of the conception of economics and other social studies as sciences was by reasoning from the analogy of astronomy and physics. When men began to think about economic problems, it occurred to them that their thoughts could be arranged in the model of the already existing sciences. Hence the effort to formulate scientific laws in economics. A recent critical scholar in the field of social sciences has defined a scientific law as "a description of an invariant pattern of social phenomena explicable by means of a generally accepted theory of social causation which in turn must be explicable by means of a plausible hypothesis concerning human nature and social relations."¹ To illustrate this, although by a questionable case, we may take the Malthusian law. The pattern of social phenomena is the more rapid growth of population than the food supply. The generally accepted theory of social causation is the law of diminishing returns. And the plausible hypothesis concerning human nature is the

¹ Har, K. D., *Social Laws*, p. 20

tendency to reproduce so that population will increase more rapidly than the food supply.

The question whether economics is an exact science or not depends upon whether the so-called economic laws are of universal validity or are mere hypotheses or aphorisms. Many of the leading economists seem doubtful on this point. Different economists describe the same economic generalizations as laws, hypotheses, principles, theories, or even notions. Thus the doctrine of Malthus is referred to as the Malthusian law, the Malthusian hypothesis, or the Malthusian theory. The more dogmatic economist may use the term law; the more sceptical may use the term notion. A cautious thinker like Marshall defines an economic law as a statement of economic tendencies.

The question at issue is whether these tendencies are historic and local or whether they are universal. Not all of the economic generalizations of the economists are supposed, of course, to be universal. John N. Keynes¹ divides the subject-matter of economics into three divisions: First, economic uniformities, which are universally true; second, the ethics of political economy, that phase of economics which is a branch of ethics; and third, economic precepts, that branch of economics which is historic and relative. Keynes also holds in another part of his book that there is no necessary relation between economics and ethics. In other words, economic theory which deals with the discovery and formulation of economic laws follows one trend. Applied economics, or a study of specific economic problems, follows a different trend. And there is no integration between pure and applied economics. It is this tradition of economic theory which the author believes has contributed much to the present chaos of thought among economists. Perhaps the matter of economic laws will be clarified by a classification of tendencies. Another term for tendency is secular trend. A universal economic law would be a continuous trend which has prevailed throughout history. These trends may take two directions: first, a linear trend, and, second, a

¹ Keynes, J. N., *Scope and Method of Political Economy*

cyclical trend. A linear trend is that of two or more complementary or interdependent factors, one of which is increasing at a faster rate than the other. The secular or reverse trend might be described as a form of mechanical adjustment in which the increase of one complementary factor brings about conditions which check the increase in that factor and stimulate the increase in the complementary factor. An example of linear or secular trend would be that of Ricardo's "law" of industrial progress, in which rent was supposed to increase, profits to diminish, and wages to remain practically constant. Examples of the secular laws of mechanical adjustment would be the law of supply and demand, Gresham's law, and the law of the equivalents in the long run between imports and exports.

As regards the laws of secular trends, there are *a priori* logical grounds for scepticism as to whether such trends could continue indefinitely, or, in other words, whether a formulation of such trends could be universally valid. If two factors, each of which is necessary to the other, continue to develop at a different rate, how could the process continue without coming to at least sporadic halts? In other words, the law is a statement of how secular trends are checked or reversed. From this point of view the Malthusian law is simply a statement of how a secular trend in which complementary factors get out of proportion to each other is checked, either automatically, as in the positive check, or consciously and purposively, as in the preventive check. Thus the Malthusian law is a form of the law of the proportion of factors when the factors are reduced to two—population or the need of food and land as the source of food. It would seem mathematically impossible for two interdependent factors to increase definitely at different rates unless one could be progressively substituted for the other. Where there seems to be an unbroken secular trend there is frequently involved a verbal fallacy. Thus, when we say that population tends to increase faster than land, it is assumed that these terms have the same meaning and content in different periods, and that no other factors are introduced into the

equation. In other words, we assume that the elements in economic analysis remain constant, just as the physicist dealing with the molecule as a unit assumes that the molecule of one age is exactly the same as the molecule of another age.

This situation does not exist in economic analysis; hence there can be no economic law correlating the trend of economic factors because the factors are constant only in name, the specific content gradually changing in the course of time. In the classical economics the chief factors considered are labour or the human element, land or natural resources, and capital, the tools or instruments made by man. Each one of these factors, however, is not absolute and unvarying. In the course of evolution it may subdivide into a number of factors, as was explained in the first chapter of this study. Each factor may undergo a change on the occasion of an increase in quantity or quality of one of the complementary factors. In the pre-historic age, according to Roscher, the main economic factors were land and labour, and land was a factor of greater significance. Labour or the human element was entirely subsidiary, being concerned merely with finding and picking the goods produced spontaneously by nature. Human nature under these circumstances was simple. If we go back far enough to a putative arboreal age, the land itself, that is, that part of the earth which furnished sustenance to man, was greatly limited in extent, the habitat and the source of sustenance being chiefly in the form of trees. A change in one factor of human nature, giving rise to primitive inventions which enable men to enter the pastoral stage, make available an immensely increased area of the earth as the source of food supply. The rise of invention represents the appearance of a new economic factor, or a great differentiation in the original factor—labour. The use of improved appliances on the wider area of land made available by them makes possible a great increase in population. This, on the one hand, gives rise to migrations, conflicts, and wars, and so occasions the rise of another class—the rulers—or another factor—government—unless one prefers to admit a still wider

differentiation in the original factor—labour. On the other hand, it makes possible the division of labour, which, in the work of Adam Smith, was considered the main factor in the increase of production and in social progress. The division of labour makes possible the rise of another class, the organizers or managers of labour, and so introduces a new economic factor, unless we wish to further differentiate the original factor—labour. As in the earlier period the dominant factor was land, now, according to the generalization of Roscher, the dominant factor is labour. The minute division of labour makes the work of each individual workman increasingly monotonous; and this monotony, this repetition of a few simple movements, is a condition favourable for more rapid mechanical invention. As inventions increase, they furnish a cultural basis for further inventions, as explained in Professor Ogburn's *Social Change*. The progress of invention substitutes natural for human power, and a new and hitherto merely potential property of land becomes operative. Capital costs become more significant, from the production point of view, than human or labour costs; and Roscher's third great economic stage has been reached, that in which capital from the point of view of the production of wealth is of more significance than either labour or land. Thus the evolution and change of the factor labour has increased the supply of land and generated various other distinctions which may be treated as separate factors in the economic analysis.

The increase in land has also reacted upon the quality of labour or human nature. Here we are venturing into the fields of anthropology and history. American historians have shown how abundance of land in a new country generated the quality of the frontiersman, his optimism, his individualism, his hospitality. Abundance of land changed men from the submissive serf or peasant of the feudal ages to the self-reliant frontiersman and Jacksonian Democrat of the United States. Democracy, in the words of Professor Sumner, is the product of the world's need for men, or, in other words, a sudden great relative increase in the amount of land in relation to

population. So discovery of a new world transforms human nature, or makes possible the stamping of human nature in a more heroic mould. Frontier conditions, or new *per capita* supplies of crude land, wake new or dormant traits, such as inventiveness; for the relative scarcity of labour makes high wages and so the profitableness of substitutes in the form of labour-saving inventions.

So the change in the factor land brings about a qualitative change in the other factor—labour or the human element. The same may be said of the change in the factor capital, which may be further differentiated into two factors: invention and the saving of money of loanable funds. Inventions change human nature, or at least human behaviour. The long-bow is said to have destroyed feudalism. This did away with chivalry. This, in addition to money and other inventions, brought about regularity of life, a higher valuation of industriousness, initiative, and inventiveness. The steam engine, the automobile, and the aeroplane are further changing human nature, making for mass production, the decay of Jacksonian democracy and frontier individualism, and the rise of social co-operation and the corporate habit of mind. This analysis, if it is valid, may suggest an interesting aspect of the Malthusian law. That law was a statement of a trend as between only two factors, population (or labour) and the food supply, which is assumed to be identical with land. In the above analysis, however, population or labour in the course of history is seen to evolve and differentiate, so that realistic observers at different times are discussing different aspects of the economic situation which have arisen out of the differentiation of the original element—population. Land also is homogeneous and invariable only in name. It is true that in a physical or geographical sense land is a constant, as the mere surface of the earth or as the physical world; but in an economic sense, as an actual source of available food supply, it has varied with the other factors; it has increased with man's knowledge, invention, and the evolution of technology.

"Again and again it has been said that there is only a given amount of land in the world, and that as population increases land is bound to increase in value. But such a generalization completely ignores the fact that modern ingenuity has made a single acre of farm land do the work of many acres by means of intensive cultivation. It ignores also the great irrigation projects which have brought arid and waste lands into use. It ignores the achievements of modern transportation and modern engineering skill. Rapid transit has made it possible to spread the cities over great areas, and the skyscraper has made it possible to concentrate an enormous population within a small area. The result has been the discovery that the possibilities of land utilization are practically infinite instead of limited. There may be only a given amount of land in the world, but it is susceptible of increasingly intensive use."¹

All of this is in illustration of the generalization that a secular trend cannot be formulated as a universal law, either because the trend itself is limited by the interdependence of the separate factors or because the different factors so react upon each other that their content continually changes. An example of this is the factor land. In the putative arboreal state, land, in the economic sense, was limited mainly to trees. In the pastoral stage it was limited to the areas which produced natural grasses. The invention of the plough greatly increased the quantity of land available as a source of food. When the iron and steel plough was substituted for the wooden plough more land was made available, with the invention of the tractor still more. The discovery of coal and the invention of the steamboat and the railroad made available the resources of unused supplies of land which were formerly too remote or inaccessible to the white man because of the climate. The use of coal and petroleum and electricity add to the available surface land the power of falling water, and open up the resources for miles beneath the surface. The building of sky-

¹ Holden, A. C., "The Crisis in Real Estate," *Harper's Magazine*, November 1931, p. 676.

scrapers in the large cities make possible a great vertical expansion in the area of usable natural resources. Finally, the development of chemistry makes theoretically possible an almost unlimited elasticity in extracting power from the sun and nitrogen from the air or from the decomposition of the atom.

Another illustration of the principle that a secular trend cannot be universal is Wagner's law of the increase in public expenditures. Wagner holds that public expenditures tend to increase with the development of civilization. The critical word in this definition is the term "increase." Is it used in a relative or in an absolute sense? If it is used in an absolute sense, that the governments of all civilized countries continually increase their expenditures in terms of money, the term has practically no significance, because that also is true of all the other aspects of civilized nations. Their population increases; their *per capita* wealth and income increases; their average *per capita* individual expenditures increase. So in this sense of the term the increase in public expenditures is a truism, and not a characteristic of government. The other sense of the word "increase" means a more rapid increase of public expenditures than private expenditures. This would be logically impossible after a certain stage, because the increase of public expenditures would encroach upon its own source in the private income of the taxpayers. In the relative sense of the term Wagner's law does not invariably hold historically.¹ Public expenditures, although increasing absolutely, have taken over considerable periods a decreasing percentage of the national income.

So it would seem that secular trends or generalizations as to correlations between different economic factors could not be formulated so as to be universally true. Is the same true of cyclical laws or processes of adjustment between complementary factors? If two complementary factors vary in supply and market value, could there not be a universal law describing the mechanism by which these factors could be brought into

¹ Peck, H. W., *Taxation and Welfare*, chapter vi.

readjustment? Several economists speak of Gresham's law as of this class. Har speaks of "some laws of a reasonable degree of probability, of which Gresham's law and the Malthusian law of population are perhaps the best examples."¹ It is evident, however, that the operation of Gresham's law is conditioned upon the continuance of a social institution, the bi-metallic standard of currency. As long as this condition exists the law may be assumed to operate, but there is nothing necessary about the precondition. In 1873 silver was demonetized in the United States, and the trend in the monetary systems of the world has been toward the gold standard. Thus an act of Congress can remove the conditions which make possible the operation of the law. The difference between a law based upon a contingent social institution and a universal natural law is thus evident. The legislature could repeal the law of the free coinage of silver, but they could not repeal the law of gravitation.

The principle of long time equivalents between imports and exports might be stated as a law, although it in reality is merely an arithmetic truism—that is, in the long run people have to pay for what they buy in terms of marketable goods and services. The so-called law of comparative cost could also be stated as an arithmetic truism. This does not mean that goods will always be produced where conditions are most favourable, where the cost of production is lowest; but if goods are produced under conditions of absolute or comparative advantage the producers will be more prosperous. In other words, if and when goods are sold at a price determined by supply and demand on a world market, the low-cost producer will be more prosperous than the high-cost producer. Hence, if men specialize in the production of goods for which their region has a social or natural advantage, they will be more prosperous. In view of the above considerations let us consider some of the so-called laws of the classical economists. Among these let us consider the principle of natural right and *laissez-faire*,

¹ Har, *Social Laws*, p. 242.

the law of the wages fund, the iron law of wages, the theory of the economic man or enlightened self-interest, Ricardo's three laws, the law of supply and demand, the law of the cost of production, and the law of comparative cost.

Some of these are spoken of as principles or theories rather than laws. Har distinguishes between teleological laws, apriorisms or methodological presuppositions and scientific laws. A teleological law is an expression of social ideals, of personal valuations, or of moral aspirations. Examples of this are the ideal of enlightened self-interest which became formulated as the hedonistic calculus of Bentham. The assumption of natural laws and of natural rights and the notion of *laissez-faire* are of this character. They are social ideals or personal valuations. From the point of view of social science they are valuable as preliminary surveys of problems which may lead to laws or useful generalizations; but in no sense can they be termed social laws.

The wages fund theory, as was demonstrated above, was a hypothesis that was finally abandoned by the economists. The iron law of wages was the formation of a secular trend which has been proved invalid. Both Malthus and Ricardo gave evidences to show that this law had not operated universally up to their time. Their assumption that it would operate as a general rule may have been an unconscious expression of the personal wish. At least the rise in real wages since the time of Ricardo has also relegated the iron law of wages to the category of historic fallacies. The law of supply and demand will be considered below. Ricardo's law of the cost of production, namely, that production costs include wages and profits and exclude rent, is based upon his law of industrial progress, which in our view was a universal formulation of temporary trends, which again were based on methodological presuppositions. These were based on the conception of the capitalist employer as an economic man, the conception of the landlord as idle and unproductive, and the conception of the wage-earner as a typical Malthusian man. By means of these methodological

assumptions Ricardo was enabled to vary some factors and keep the others constant in such a way as to rationalize his desire for certain social reforms. His followers, many of them, used his own methodological presuppositions to rationalize the quest of private gain. Ricardo's laws or theories of wages, profits, and rent were thus the product of *a priori* assumptions and temporary trends, or the peculiar conditions of an old, well-populated country just before the dynamic trends which developed in the new era of world economics.~

Since the so-called economic laws were based on methodological assumptions, what was the nature of the method and why were these particular assumptions made? The method, that of the deductive method, was a sort of mental laboratory in which the thinker imaginatively varied one factor, keeping the other factors constant. In this way he was enabled, supposedly, to reach scientific or at least useful conclusions. But why were certain factors assumed as static and others dynamic? In fact, Ricardo's method worked in some such fashion as this. The supply of natural resources was static, invention was static, labour increased according to the Malthusian law. The employers did not increase so rapidly, since they were a class to which the Malthusian law did not apply. Capital increased if employers received adequate profits. Progress is based on the accumulation of capital. Hence profits is the pivotal force in social progress. The basis for this peculiar assumption as to static and dynamic factors was probably the unconscious wish, the writer's personal valuation. And why did he have this particular wish if it were not due to early conditioning or the training in the preferences or the interests of his class? Conditioning by early habits of thought is due to the various forces of the environment, the chief of which may be summed up as the institutions of one's time. Hence the classical economics, if carried back to its ultimates, becomes a species of institutionalism, of which, however, its authors were in general but partly conscious.

If this line of inference is correct, a good many of the

so-called classical laws are simply social class rationalizations formulated as analogies to physics or astronomy. In this sense an economic "law" is a statement of what certain people would like to have keep on happening: a statement that a beneficial condition is going to continue, made by those who are special recipients of the benefits; a statement that a temporary trend is a permanent or universal trend, the statement being made by those to whom the temporary trend brings an economic advantage. One historic exaggeration is to identify economic laws with *laissez-faire*, and to speak of governmental interference with natural economic laws.

So in summary of the classical method, assumptions as to universality of trends or assumptions as to certain static and dynamic factors, and assumptions as to social institutions, are made on the basis of an unconscious wish, the wish being for a condition of group advantage or privilege. The result is a rationalization or type of self-deception. In the hands of a liberal and public-spirited man like Ricardo, these rationalizations may justify progressive political and social action; but they are dangerous weapons in the hands of genuine economic men. The modern scientists, even in the sphere of physical science, are moving away from the notion that there are mathematical, universal laws of statics; the attitude is changing toward the dynamic, the experimental, and the relative. In the field of social sciences Professor Chaddock has pointed out the dangers of the assumption of static conditions, which he calls the fallacy through the influence of the uncontrollable variable.¹

There are, however, certain economic laws which are deserving of more complete analysis than these so-called classical laws just considered. They are the Malthusian law, the laws of diminishing returns, constant returns, and increasing returns, the law of diminishing utility, and the law of supply and demand.

The Malthusian law, as was explained above, operates only

¹ Chaddock, *Statistics*, pp. 32, 250

under certain conditions. These may be formulated from the static and dynamic point of view. The static formulation assumes a limited supply of the best land, no new inventions or improvements. The dynamic formulation means merely that population is increasing more rapidly than the source of the food supply made available by increased natural resources or new inventions and improvements. If there are vast tracts of new land available and agricultural methods are improving rapidly, the problem of population will cease to be important, and will be eclipsed by the problem of the marketing of agricultural commodities. If all the factors were increasing at the same rate, that is, if the factors that underlay the food supply are as elastic as those that occasion population growth, there will be a proportionality which will obviate both the population problem and the farm problem. Historically there have probably been relative shortages of land in comparison with population within certain periods; for example, the period in Europe before the discovery of America, and during the Napoleonic wars, the period which occasioned Ricardo's theory of rent, when the English people were confined chiefly to the resources of their own land because of Napoleon's continental policy, and before the cheap transportation had made available the agricultural resources of the New World. Marshall remarks in this connection: "He (Ricardo) could not anticipate the great series of inventions which were about to open up new sources of supply, and, with the aid of free trade, to revolutionize English agriculture." The Malthusian law was thus a statement of the conditions in an old country. The opening up of vast resources of land in North and South America, Australia, South Africa, and Siberia reversed the former trend as between population and the food supply. Yet a period of world peace, agricultural improvements, and the development of sanitation might disturb the optimum proportion between population and resources that are basic to civilization, so that a social problem akin to that of Malthus might arise. The problem, however, might be generalized as that of

a malproportion of economic and social factors rather than that of the more simplified problem of Malthus.

The law of diminishing returns is also a result of the static analysis. It is assumed that there are no changes in the method of cultivation. Yet, as a matter of fact, with the growth of population there is a gradual change from extensive to intensive methods, from grazing to grain raising, to mixed farming, to dairying, market gardening, horticulture, and specialized agricultural industry. This does not necessarily mean a decreasing *per capita* labour income, and may mean a great improvement in the conditions necessary for a worth-while life.

So much for the historic relativity of the environmental basis of the law of population. The human conditions for the operation of this law are also contingent. It does not apply to the upper classes or to the most advanced nations. A rise in the standard of living or change in ideals of life may change the ratio of population increase to that of food supply. Finally, a more general knowledge of birth control may adjust population to natural resources and the state of the industrial arts without necessitating the operation of the old moral check which Cairnes thought was a Utopian ideal with respect to the wage-earning class.

If the Malthusian law is not a scientific law, it nevertheless has great positive value as a social standard. Perhaps in place of the term "law" one should substitute the term "principle," which might be defined as a general standard for measuring social phenomena. (The Malthusian principle is a statement of a primitive tendency which holds with some accuracy when applied to backward races and retarded classes, but which yet may be used as a standard for measuring cultural trends. As a basis for the objective correlation between the amount of food supply and the volume of population, between the improvement in the standard of living and the limitation of the size of the family, it is of great value as a starting-point for scientific research and for the framing of meliorative policies. Out of the study of Malthus and his followers there have developed

valuable studies in consumption and population like those of Engels and Pearl.

If one wishes to formulate the Malthusian principle in the form of a universal statement which will recognize its historic contingency and relativity, one could state it as follows: If and when population increases faster than the food supply, there will result a decline in economic and social welfare. But if the food supply increases faster than population, there may result a rise in the standard of living or the appearance of new economic problems like that of marketing. The Malthusian law may be considered a particular illustration of what Professor Davenport has called the law of the proportion of factors. If there is a right proportion among all the factors in a cultural situation—natural resources, people, instruments, knowledge, organization, technology, and government, we will have the condition which, from the static point of view, would be called that of normal equilibrium, from the dynamic point of view, that of orderly and peaceful progress.

The so-called laws of diminishing returns, constant returns, and increasing returns are also very important economic generalizations. The law of diminishing returns is held to apply to extractive industries; the law of constant returns to handicraft and personal service industries; and the law of increasing return to large-scale, highly capitalistic industries like manufacture and transportation. Professor Davenport¹ has shown that all these can be formulated as a single law, which he calls the law of the Proportion of Factors. This is based on the almost self-evident truth that "disadvantage attends any excess or defect in the supply of productive factors relatively one to another." Among the classical economists it was assumed that diminishing return applied to land. The assumption was that of a scarcity of the better grades of land. Increased cultivation made necessary by the growth of population caused men to resort to poorer and poorer soils, with the result that the return from each unit of capital and labour was progressively less.

¹ Davenport, H. J., *Economics of Enterprise*, chapter xxiii.

This was another way of saying that there was historically a declining proportion of good land to population, a generalization valid only for certain periods in history. With the opening up of the United States this generalization ceased to be true. There was an indefinite supply of new land available. As population increased and there were waves of westward migration, better and better land, practically free, was available as the farmers moved from the rocky and hilly New England to the flat, fertile plains of Illinois and Iowa. After that, an increase of population compelled men to resort to inferior lands—inferior from the point of view of scarcity of moisture, if not from that of the properties of the soil. Hence it cannot be said that in all cases an increase of population causes a resort to poorer sources of food supply, even without the other alternatives of invention and agricultural improvements.

If increasing population and limited supply of land, as in England, force men to more intensive cultivation, that is, to the application of more labour and capital to the same amount of land, the result is said to be diminishing returns or a decreasing rate of return from additional units of labour and capital. This, however, may not be a decreasing return per unit of economic factor applied, because the increase in capital and labour is not accompanied by an increase in the other factor—land. For example, in the first case there is x factor, labour, x factor, capital, and x factor, land; total, $3 \cdot x$ factors of economic power. In the second case there is $2 \cdot x$ factors of labour, $2 \cdot x$ factors of capital, and $1 \cdot x$ factor of land; total, $5 \cdot x$ factors of economic power. To expect that in the second case the ratio of return would be as 6 to 3 instead of 5 to 3 would be an irrational expectation. However, it might be that a further increase in the application of capital and labour such as $3 \cdot x$ labour, $3 \cdot x$ capital, to $1 \cdot x$ land would be less than a proportion of 7 to 3, which would be a genuine case of diminishing return, from the point of view of application of all economic factors. This would be an example of the violation of Davenport's law of pro-

portionality, which he would characterize simply as incapable management.

Theoretically, there is no reason why an increased application of capital and labour might not bring about an increasing proportional return on the total investment if one started out with a small, ill-equipped labour force, or a large fertile farm. On the other hand, researches in agricultural economics have shown that conditions in the modern dairy industry are such that increasing the amount of land and capital equipment up to a certain extent may increase the relative returns in the physical output of the farm or in money returns.¹ Thus a one-man farm in New York State or New England of fifty or sixty years ago was ideally of from eighty to one hundred acres. But with new mechanical equipment, electric milker, manure spreader, hay loader, tractor, truck, and automobile, the individual farmer may take care of the stock and crops on two hundred to three hundred acres. Davenport might say that the new technological conditions had brought about a new optimum proportion of economic factors in the dairy industry. One man, the unit of labour and management, is now combined with a larger proportion of land and productive instruments. But even here no optimum proportion can be actually formulated, for the entrepreneur factor is itself variable and not to be identified with the individual farmer. The success of the larger combination of land and capital depends upon the greater efficiency of the farmer, his knowledge, foresight, and mechanical ability. The principle of diminishing returns, then, is nothing more than excess or defect in the relative proportion of the different factors of production that are available under the given conditions.

The formulation of the law of diminishing returns by the English economists has an historic explanation. For many years the supply of land had been relatively fixed and population

¹ Peck, H. W., "The Influence of Agricultural Machinery and the Automobile on Agricultural Operations," *Quarterly Journal of Economics*, May, 1927.

had increased. Then there developed among the economists the static method of analysis, which has been explained and criticized above. The result was the law of diminishing returns with respect to land. In the United States this analysis has not been so applicable. As the orthodox theory it is a tradition imported from Great Britain. The increase and the westward flow of population made available, as was explained, better land at practically no cost, except the cost of transportation and of breaking with earlier associations. Also, with the development of population in the United States there have been changes in the mode of cultivation from extensive to intensive methods. These changes probably have represented now increasing returns and now decreasing returns, or an increase or decrease of labour income to the individual farmer. It was fundamentally the questions of making a better or a poorer approximation to an optimum proportion of changing and varying factors according to the potentialities of the times. Below are hypothetical cases of the operation of this law of proportion in the case of grain-raising.¹

The so-called law of constant returns applies to that class of industries in which more static conditions have been realized, and in which expansion would not cause a disproportion of factors. This is especially true in the case of handicraft industries. If the material for a pair of shoes cost one dollar, and the shoemaker can make one pair in a day, and the shoes would sell for three dollars, the wages of shoemakers, under competitive conditions, would be two dollars per day, and the cost of shoes three dollars. Under those circumstances two men could produce twice as many pairs of shoes in a day as one man, five men five times as many as one man, ten men ten times as many as one man, at just ten times the cost, and so on. Since each skilled worker was the unit of labour and each used the same material, larger operations would bring both proportional costs and proportional returns. Hence the law of constant returns was simply a generalization with regard to those indus-

¹ Cf. pp. 231-39.

tries in which under the given conditions proportionality was attained as a matter of fact. The gradual change from conditions of this kind to the factory industry to which the so-called law of increasing returns is applicable gave a background to the early classical theory, which justified in part the early assumptions as to free competition, natural rights, relative equality of profits and wages, and other of the static assumptions of the later classical economists.

The so-called law of increasing returns, which also represented an incomplete conception of the larger principle of proportionality, can also be explained historically. Manufacture developed out of the handicraft stage with the individual workmen using a few simple tools. It was at the beginning a small-scale industry. Agriculture was an old industry, having already gone through a long period of evolution. A great deal of capital had already been applied to land. The period from the middle of the sixteenth to the middle of the seventeenth century has been characterized as the period of the Agricultural Revolution, a period of the increasing application of capital to agriculture. The classical economics was written at the beginning and in the course of the development of the Industrial Revolution, a period of the increasing application of capital to manufacture and transportation. The new industry became highly dynamic and experimental; and under conditions of rapid invention, especially the development of the steam engine, production on a larger scale became increasingly efficient. This fact that in the case of manufacture efficiency increased with the size of the plants, Professor Davenport characterized as the law of advantage and size.¹ This seems to the writer, however, as merely another version of his fundamental law of proportions. This law of increasing returns, or law of the desirability of large aggregates of all the factors, has various bases. It has a technological basis in the greater efficiency of the steam engine. It has a managerial basis in the functions of the modern entrepreneur. If the function of management is to determine

¹ Davenport, H. J., *Economics of Enterprise*, chapter xxiii.

general policies, then the concentration of industry makes for greater efficiency, for then the ablest man available, or the ablest group of men, may determine the policy which may be widely applied. In the words of Davenport, "the entrepreneur may have in charge all that he can advantageously attend to; or, on the other hand, a part of his supervisory and managerial power may be running to waste."¹ The so-called law of increasing returns has a basis in marketing economics, and a basis in specialization of labour, foremanship, and scientific experiment.²

Under certain conditions the law of increasing returns might apply to all industries, just as under certain conditions the law of diminishing returns might apply to all industries. Historically, in the time of Ricardo agriculture had already been through a long evolution, and had reached a more stable condition, not reaching another highly dynamic state until the beginning of the twentieth century, when new power machinery driven by gasoline or electricity made possible increasing returns in the physical output per man, or, in other words, a new proportion of factors in agriculture. Both increasing returns or decreasing returns are evidence of excess or defect in proportioning or in efficiency in the function of management. If in any situation there is a defect in any one industrial factor, an increase in that factor will bring a lower unit cost of the product, an increase of return to the producer and a fall of price to the consumer. Where this factor in defect has been increased at a certain stage, there is reached the optimum proportion. If this factor is further increased, there results a rise in the unit cost of production of the product, a decrease in reward for the producer, and a rise in price to the consumer; and one has the so-called phenomenon of diminishing returns. Since all proportions determined by analysis and experiment are made obsolete by new discoveries and inventions, or changes in the quality or organization of men, the optimum proportion has to be determined for each occupation and each enterprise

¹ Davenport, H. J., *Economics of Enterprise*, p. 439.

² Cf. Taussig, F. W., *Principles of Economics*, book v, chapter iv.

according to all the contemporary conditions. Efficient management is the power to analyse the concrete situation, and to foresee the direction of change so as to achieve priority in making adjustments in the direction of the most desirable combination.

| This acceptance of Davenport's law of the proportion of factors will lead in the field of economic theory to momentous consequences. For it will compel the abandonment of the Ricardian distinction between land and capital, and lead to the conviction that the so-called universal laws of political economy are all but partial or inadequate formulations of the law of proportions. The wages fund theory was a half-understood statement of the need of a greater proportion of capital to other factors than had existed before. The Malthusian law was a one-sided version of the need of proportion between population on the one hand and natural resources, productive instrument, scientific knowledge, and technical skill on the other. The iron law of wages was based on a pessimistic assumption that you cannot escape from the over-proportion of unskilled labourers. Much of the criticism of the early classicists of the conditions under feudalism and the later Middle Ages may be summarized as a lack of proportionality in the different branches of production. Spain, for example, became poor because the Spaniards overrated personal services in comparison with mechanical and agricultural occupations. Her great army of nobles, clergy, and servants represented an excess of one productive class, or, in other words, a violation of the law of proportions in the field of production. Davenport's law of proportions not only supersedes the classical laws, but the method it implies supersedes their method. As was pointed out above, the assumption of the classicists that there were only three major factors—land, labour, and capital—was sufficient for only a provisional analysis. A more detailed examination of the field of production and consumption necessitates the introduction of new logical units of analysis—government, invention, science, credit, to say nothing of sub-

divisions of these factors. Davenport's formulation of this is impressive: "As the costs are not four, but legion, and the distributive shares not four, but legion, so the factors of production are legion; the interrelations among the factors are infinitely complex—some relations of substitution, and some complementary relations, but all relations are in process of constant change, and both in variety and in mutability defy fixed classification."¹

Other so-called universal economic laws, such as the law of diminishing utility and the law of supply and demand, will be considered in the chapter on "Marginism and Pecuniary Logic."

In addition to these criticisms of the classicists as regards their assumptions as to static conditions and trends, and their assumptions as to the existence of invariable economic laws, it is worth while to consider also certain other of their assumptions from the point of view of their conformity to the facts. Among these is the assumption as to free competition. Marshall remarked that the classical economists exaggerated the strength of competition and its rapidity of action. It may be that this aspect of the subject can be clarified by reference to the historic point of view. In other words, we may examine historically free competition as an effective regulator of economic and social conditions.

The subject of free competition will be approached, first, from the point of view of industrial monopoly, as a study in corporations and trusts, and, second, as from the point of view of the labour problem. The author is not attempting to formulate any "laws" of *laissez-faire* or of public regulation, but to suggest certain hypotheses which may possibly develop into useful generalizations.

First, as to the conditions under which free competition may be an efficient regulator. These we may consider under two heads: first, the relation of the size of the market to the area of political control; and second, the relation of the size of the market to the scope of industrial organization.

¹ Davenport, *Economics of Enterprise*, p. 444.

Considering the first problem, that of the relation of the size of the market to the area of political control, we may hazard the generalization that in order to achieve effective control the authority of the agencies of control must be wider or at least coextensive with those operations that are being controlled. Thus, for example, in the United States, if trade is local, or merely exchange between different sections of the same state, state regulation of commerce may be adequate; but the rise of inter-state trade makes necessary the Inter-state Commerce Laws and the Inter-state Commerce Commission, an agency whose control is over the whole area in which the trade takes place. Illustrations of this same principle are easily secured from history. The individual frontier farm, like that described by J. Russell Smith,¹ was properly regulated by the owner-manager. The medieval manor was regulated by the lord, that is, the economic means at their disposal were so used as to promote the interests of those who had social control. In the medieval city, state control was exercised by the priests and guild masters, which was effective as long as trade was mainly local, that is, as long as the authority of the agencies of control was co-extensive with the agencies that were being controlled. In other words, although the state was small, the market was still narrower. We have already discussed in the chapter on "Mercantilism" how the rise of the merchants and the expansion of foreign trade, especially the traffic in luxuries which catered to the aristocratic class and furnished the world market, was a condition of the breakdown of feudalism and the rise of free individual enterprise. Economic activities expanded more widely than the area of social and political control, and eventually broke up the well-ordered economic systems of the Middle Ages. The result was the rise of economic individualism, automatic self-regulation by market price, a formulation of the behaviour of individuals with respect to the market. These two methods, central or public control and individualism, that is, centralized control of production and

¹ Smith, J. Russell, *Commerce and Industry*, pp. 17-21.

distribution, and automatic methods for associating countless independent individuals into a co-operative order, were both ways of attempting to conform to the laws of the proportion of factors. In the discussion above we have suggested that, under certain historic conditions, one method may be more effective than another and vice versa.

The second point of view for considering the assumption of *laissez-faire* is the relation of the size of the industrial organization to the size of the market. If the industrial organization is as wide as the market, an effective monopoly may be easily organized. Hence the fear of monopoly in the medieval city states and other small economic units. The size of the markets, of course, is determined by facilities of transportation. If the market is small, transportation is poor and expensive, so that, for example, the food supply of a town is secured entirely from the neighbouring country; so that enterprising individuals with some capital may conceivably buy up all available grain, and then hope for a poor harvest the following year in order to exact a monopoly price. Such an individual, in the words of the satirist, Ben Jonson, may commit suicide "on the prospect of plenty." It was this possibility of effective local monopoly, because of the impossibility of wider regional competition through the development of the facilities of transportation, which made the control of the price of grain and the assize of bread pro-social policies in the Middle Ages. But, historically, the Commercial Revolution, the development of rivers and canals, the improvements of roads, and, later, the development of the steamboat and the railroad, widened the area of commercial enterprise. In other words, over several centuries trade expanded more rapidly than the scope of industrial organization. Inter-state, inter-regional and world trade, and the individual proprietorship in business organization were the conditions under which competition would work. If an individual or a firm attempted a corner on the local market and attempted to raise prices by limiting the amount of product offered for sale, as soon as the higher price became effective

other supplies of goods would be shipped in from other regions, and the monopoly would be broken. Cheaper transportation costs was the effective remedy against industrial monopoly under these historic conditions.

With the passing of time, however, the scope of free industrial organizations widened. The corporation, the trust, the cartel, the holding company, the organization of corporations developed. International trusts arose. Business control may become coextensive with the market in the case of many commodities. Especially is this true in the class of industries called public utilities, in which the product has to be consumed at or near the place where it is produced. Now if industrial integration has caught up to the wider market, there are reproduced on a much vaster scale the same conditions that obtained under the canonist doctrine. And public regulation becomes imperative unless the consumer is to fall completely under the control of a small group of industrial autocrats. The changing conditions under which one of these methods of control, the automatic self-regulation of a free individual economy and centralized public regulation, is more effective, is a proper subject for intensive research by the historians. Our hypothesis is that for a limited period of time, possibly from Adam Smith to John Stuart Mill, conditions favourable to the effectiveness of free competition prevailed; but that with the passage of time business organization gradually overtook in scope the wider markets of commerce, so that industrial monopoly became one of the great problems of the latter part of the nineteenth century. The popular outcry against the trusts in the United States is evidence that the assumptions of the classicists were less and less in conformity to economic realities. Under these circumstances economic theory became less and less a useful system of generalizations as a basis for public policy and social reforms, and more and more a logical system, an academic discipline based on tradition.

In so far, then, as a change in the historical proportion of factors brings about the decay of free competition and the

greater influence of monopoly or partial monopoly, the classical theory of the equality of profits, or the proportional equality of profits, loses validity as a description of the facts. That is, if one entrepreneur works under conditions of competition, earns competitive profits, and another is in receipt of monopoly profits, the returns may be unequal, although both men may be equally competent. But if the classical assumption of free competition between industrial enterprisers was only temporarily valid, it was probably at no time an accurate description as to the conditions of labour. As Toynbee has pointed out, there were both institutional and psychological reasons for the immobility of labour. The institutional causes the economists strove to obviate;¹ but the psychological cause remained. The wage-earner was not an economic man.² He was not a good calculator. Men do not always seek their own economic interests. And in the case of wage-earners there were special obstacles to movement and competition—attachment to locality, the inability to accumulate the means to make a change, and the lack of knowledge of opportunities elsewhere. Free competition between capital and labour, employer and employee, did not lead to relative proportional equality and justify the classical productivity theory, since, as later economists have repeatedly asserted, competition brings fair results only when there is an equality of bargaining powers. And this does not exist between the individual employer and the separate, unorganized employees.

Finally, the notion that free competition would give justice and relative equality as between different wage-earners was rendered untenable by the doctrine advanced by one of the later classical economists, Professor Cairnes. This doctrine of non-competing groups showed that the classical doctrine of free competition in the field of labour could be assumed only under very simple industrial conditions.³ Under more complex

¹ Cf. Ricardo, D., *Political Economy and Taxation*, chapter v, pp. 82–86.

² Toynbee, Arnold, *Industrial Revolution*, p. 70.

³ Cf. Marshall, *Principles of Economics*, pp. 510, 511.

conditions, in which skill, training, and education are of great advantage, people who do not have inherited wealth and social standing and are unable to secure a complete education are unable to compete with others more fortunately situated, even if they are equally endowed with inborn gifts. In fact, as we have elaborated above, the classical economic theory won adherents as a reform movement, a social trend, as long as it reflected the aspirations of a rising class to share the opportunities and privileges of the upper classes. But the shift in comparison from that with aristocracy to that with labour reversed the trend. And classicism as a guide to social policy was finally discredited because of its attitude toward labour. Later on classical theory was adopted by some harsh employers as an excuse for cruelty to the poor. In the words of one scholar the economists forgot the non-profit-taking classes. "In allowing business men of the eighteenth and nineteenth centuries to operate without restraint, classical economics gave moral sanction to an exploitation of the working class that shocked the sensibilities of intelligent citizens."¹ It is this shift of emphasis in later classicism, this change from an idealistic, democratic, social reform theory on the whole, to a more conservative, more pessimistic attitude, this shift from Locke to Malthus, that brought about a rift between economics and ethics, and led later apologists for economic science to assert that there was no relation between ethics and economics. This abandonment of the attempt to interrelate and integrate knowledge in the different fields of social studies is one reason for the current disappointment with traditional economic theory.

✓ Another defect or limitation of the classical economics is the absence of analysis of the subject of consumption. This led to the development of the school of marginists. This lack of interest in the field of consumption, the emphasis on production and distribution, caused them to emphasize exchange value and to pay little attention to value in use.

¹ Gras, N. S. B., "The Business Man and Economic Systems," *Journal of Business and Economic History*, February 1931, p. 179.

One of the most interesting and, as it seems to the writer, neglected aspects of classical economics is the relation of classical theory to the modern business cycle. This is a subject which, according to the view of the writer, has not received adequate attention from economists. For under the assumptions and logic of the classical theory the modern business cycle would be impossible. Of course, wars and irregularities in crops would cause maladjustments as between different industries; but nothing like cyclical movements independent of such disturbances could be anticipated under the classical theory.

It will be recalled that classical economics had been subdivided into two types, early and later classicism. Negatively these may be characterized as, first, opposition to feudalism, and, second, opposition to socialism. According to the writer, this classical economics may be viewed again from two points of view: first, that of production, and, second, that of distribution. From the production point of view, the opinion is advanced that the classical economics was in general sound, and represented a permanent contribution to economic theory. From the point of view of distribution, the view is advanced that, although the economists made valuable contributions to an understanding of economic life, created valuable principles or tools for economic analysis, and made brilliant hypotheses which can be incorporated in later and more scientific research, yet many of their generalizations represented inadequate formulations, or were merely precepts valuable under temporary historic conditions.

In developing this view there will be an attempt to deal more critically with several of the aspects of classical production economics. The production economics of the classicists aimed at increasing the physical output of goods through reducing the costs of production. This was to be brought about by the fostering of unrestricted trade and commerce, by promoting industrial improvements, and by carrying forward the division of labour. In thinking of industrial improvements the

economists nearly always stressed the accumulation of capital. And their wages fund theory held that progress was conditioned on a more rapid accumulation of capital than growth in population. A modern theory of industrial progress would stress the two variables, population and invention. If inventions increase more rapidly than population, there is a condition of increasing wealth, leisure, and welfare. It seems to be a race between education and invention, on the one hand, and population with the needs of man on the other. But among the classical economists the factor of invention was generally assumed, and stress was put upon the accumulation of capital or the amassing of loanable funds through which means inventions could be made available to the entrepreneur for his task of reducing the cost and increasing the abundance of material goods. This was so probably because the classical economics was written, especially in the case of Ricardo, the most influential author, from the business man's point of view, or because that age was one of rapid improvements in the arts of production and the supply of money was a relatively deficient factor.

This ever-pressing need for more money to finance the new inventions and build the plants for making the bigger machines probably led to the classical conception of productive labour as that which produced material and tangible commodities. This was in line with the classical revolt against the feudal lords and the royal courts, which maintained a great number of idle retainers and menial servants. These personal services represented utilities, but the utilities were not embodied in durable objects and could not generate capital, like the productive efforts of merchants and manufacturers. Professor Davenport has suggested the connection between the rise of the capitalist method in manufacture and the classical conception of productive labour. "For the purpose of the inquiry as to what sorts of labour contribute to increase the aggregate accumulated wealth of society, an inquiry with which the earlier economists were much concerned, there is importance

attaching to the classical distinction between so-called productive and so-called unproductive labour. Services are in their very nature evanescent; they will not store; in coming to be they cease to be; they do not add to the stock. On the other hand, that which is material is in a general way enduring. Thus only material things appear to add to wealth. But the line of distinction which was really sought was not between the productive and the non-productive or between the material and the immaterial or between the tangible and the intangible, but between the accumulable and the non-accumulable."¹

The classical economists believed—again generalizing, probably from their own time—that there could be no general over-production of economic goods and no over-accumulation of capital. The idea that capital accumulation would never be too great, which was reiterated by all of the chief classical English economists except Malthus and the Earl of Lauderdale, was another way of phrasing the wages fund theory. This view the writer thinks was justified by the cycle of industrial improvements in the eighteenth and nineteenth centuries. In the twentieth century, roughly from 1910 to 1929, we have been made familiar with the part played by the expansion of the automobile industry in the prosperity of the United States. And economists have expressed fears of what would happen when that industry reached the "saturation-point" and had to slow down to a pace necessary only for replacement of worn-out machines. In the age of classical English economics a large part of English industry was in the condition of the automobile industry in the United States at the end of the World War. A better economic parallel to the industrial conditions in the age of Ricardo is that of modern Soviet Russia. Here inventions and perfected industrial processes can be absolutely assumed. The limiting factor is the cash to buy tractors, the equipment for the new railways, electric generating stations, and manufacturing plants, and to pay for skilled labour from abroad to teach the new technology to the unskilled native workers. A

¹ Davenport, H. J., *Economics of Enterprise*, p. 123.

Soviet economist who knew relatively little of history and who generalized from his own time, could easily affirm the supreme importance of capital accumulation, and could almost presuppose the impossibility of surplus saving.

The classical economists, with the exception of Malthus, developed the theory that there could be no such thing as a general over-production. What men call over-production is only maladjusted production. If production in all lines was developed proportionally to demand, the goods would clear through the market, and there would be no surplus stock of any kind of goods unexchanged. Genuine supply, according to Say's law, creates demand, because sellers become automatically buyers: supply of one kind of goods is demand for another. Mill remarks: "Could we suddenly double the productive powers of the country, we should double the supply of commodities in every market; but we should, by the same stroke, double the purchasing power. Everybody would bring a double demand as well as supply; everybody would be able to buy twice as much, because everyone would have twice as much to offer in exchange."¹ At this point Mill thinks of an additional complication, which was later known as a relative elasticity or inelasticity in the demand for different kinds of goods. In the words of Mill: "It is probable, indeed, that there would now be a superfluity of certain things. Although the community would willingly double its aggregate consumption, it may already have as much as it desires of some commodities, and it may prefer to do more than double its consumption of others, or to exercise its increased purchasing power on some new thing. If so, the supply will adapt itself accordingly, and the values of things will conform to their cost of production. . . . A general over-supply, or excess of all commodities above the demand so far as demand consists in means of payment, is thus shown to be an impossibility."²

Thus, according to the classical analysis, general over-

¹ Mill, J. S., *Principles of Political Economy*, p. 558.

² Ibid.

production in one line creates demand for other lines, and hence a glut of goods is an over-supply in one line relative to that in another; and there is no general or continued over-production. Dynamic conditions due to wars, the weather, or industrial improvements, and the fact that the demand for some goods is more elastic than the demand for others, will cause temporary maladjustment. But that is not over-production; it could just as truly be called under-production; it is a relative over-production of some things and a relative under-production of others. And, according to Mill, this condition will soon be remedied through the operation of free competition, which restores normal values and reduces prices to the cost of production. It will be noted that Mill, in line with the classical method, makes several assumptions. One is that demand or purchasing power comes from the sale of economic goods, and from no other source. Another is that invention uniformly proceeds faster than the expansion of available loan funds. A third is the existence of free competition or the absence of industrial monopoly; and a fourth is the existence of a world market and absolute freedom of trade and exchange.

In answer to Mill's arguments that supply always regulates demand one might adduce a number of rather important exceptions. Some people acquire purchasing power without contributing to industrial production. The recipients of inheritances, gifts, pensions, public appropriations or grants, alimony, blackmail, theft—these classes may secure purchasing power without productive effort. Swindlers, militarists, racketeers, machine politicians, and corporations which secure semi-monopoly privileges through lobbying, are examples of groups that secure purchasing power and help determine effective demand without contributing proportionately to production. Mill's theory of an economic equilibrium through the working of supply and demand also assumes the operation of the principle of productivity. Producers receive a purchasing power equal to the value of what they contribute. A more realistic approach, based on the modern evidence for permanently

unequal profits in different industries, leads to a different conclusion from Mill's.¹ Supply creates demand, but a different volume of effective demand in different occupations. Some producers, like the American farmer of 1930, produce for less than cost. Although it is true that the costs to the producer are distributive shares, yet residual profit is also a share. Under the money system distribution in the form of wages, interest, rent, and profits may not mean the creation of immediate demand, for money is an indefinite store of value. As long, however, as invention is proceeding more rapidly than the accumulation of capital, supply will generate corresponding demand; for the surplus derived from profits or rent which takes the form of corporate surplus or loanable funds will be at once absorbed in the making of new capital goods. Labour displaced by larger labour-saving machines will be put to work in making new and better machines; there will be increase of productivity, without unemployment. J. S. Mill, in summing up the view of the classicists that there could be no general over-production, is thus reasoning from the assumptions of classical economics, some of which were probably only of temporary validity. It is significant that Lauderdale and Malthus—the first of these a man with great independence of mind, and one extraordinarily free from the stereotypes of his day, and the other a man versed in history—should both have admitted the possibility of a general over-production of goods. Roscher, the German economist, points out the relativity of Mill's analysis. There are certain consumptive customs corresponding with the distribution of the national income. Every great and sudden change in the latter is therefore wont to produce a great glut in the market. The party who in such case wins is not apt to extend his consumption as rapidly as the loser has to curtail his, partly for the reason that the former cannot calculate his profit as accurately as the latter can his loss. Also laws and the barriers interposed by tariffs may hinder the too-much from one country from flowing into the

¹ Cf. Friday, David, *Profits, Wages, and Prices*.

too-little of another. Lastly, the introduction of money destroys the usefulness of the whole abstract theory. So long as original barter prevailed, supply created demand, although here the demand in many cases was less than the supply because of the difficulties of transportation, the perishability of goods, and the necessity for a four-fold confluence of demand. Later on, the introduction of money into the equation still further destroys the usefulness of the abstract theory. By the intervention of money the seller is placed in a condition to purchase only after a time, that is, to postpone the other half of the exchange transaction as he wishes. Hence it follows that supply does not necessarily produce a corresponding demand in the real market. In other words, production does not always carry with itself a guarantee that it shall find a proper market. Theoretically, then, supply generates a corresponding demand only in the barter economy, and then only in so far as commodities can be exchanged. The introduction of money and credit disturbs the equilibrium of demand and supply. In the money economy, supply may not immediately generate a corresponding demand, for the demand half of the transaction may, at least in part, be postponed. In the credit economy the reverse may be true—demand may precede supply, in which case effective demand may be simply the banker's estimate of probable future supply, or future value, discounted at the market rate of interest.

To illustrate how in some cases present economic production does not create an effective demand for other goods, take the case of post-war Germans or British who attempt to pay off the principal and interest on war debts. An increased production may mean only a more rapid amortization of war debt, and not an increased demand for food and raw materials. The post-war depression of American agriculture is an example of this principle. When Europe was engaged in the "unproductive" activities of war, was destroying rather than accumulating goods, American farmers were more prosperous than after Europe returned to normal economic activity. In the long run

probably the classical principles operate, but the time—sixty-two years of war debt payment—is beyond the calculation of the individuals; it becomes a matter of statesmanship and of collective, long-time social policies.

Also there is another case in which the production of economic goods in the physical sense is not under present market conditions reflected in a demand for other commodities. This is in the case of industries or enterprises that have a monopoly or partial monopoly of the kind of goods for which the demand is inelastic. Under these conditions effective demand may be increased by a destruction of goods or by a limitation of the supply. Producers may sometimes make more money (increase effective demand) by producing less goods. Of course, this is contrary to the classical assumption of competition. But what is needed is an economic theory that will explain or formulate all kinds of facts and not exclude *a priori* certain conditions that actually do or may more or less obtain.

So it appears that the classical analysis holds only under a certain set of selected historical conditions. Among these are a world economy or free trade, free competition, resulting in relative equality in profits and wages, no purchasing power secured except through industrial production, a more rapid rate of invention than of capital accumulation, and the absence of the disturbing factor of delayed consumption or production through the use of money or credit. Since most of these conditions are not realized or but partly realized to-day, it would appear that crises and business depressions cannot be automatically obviated without public control, and that a *laissez-faire* policy cannot preserve society against maladjustment in production.) John Stuart Mill evidently thought that this theory of the automatic adjustment of production was basic to the classical economics. In speaking of the impossibility of a general over-production, he says: "The point is fundamental; any difference of opinion on it involves radically different conceptions of Political Economy."¹

¹ Mill, J. S., *Principles of Political Economy*, p. 562.

A modern theory of industrial depression opposed to that of Mill and the classicists is the theory advanced by Foster and Catchings¹ that depressions are caused by deficiency of consumer demand. This theory is the expression of an age when there is an entirely different proportion of factors from that which prevailed in the period from Ricardo to J. S. Mill. According to the theory of Say and Mill that supply creates demand, the market is a mere mechanism for achieving equilibrium. But if the above criticism of Mill is valid, namely, that the total purchasing power is not always so commensurate with current production that supply and demand are in equilibrium, then the market, or total effective demand, that is, the amount of money in the hands of would-be consumers, becomes a separate factor in economic analysis. This condition, according to Foster and Catchings, has been realized in the United States. Savings, or the supply of loanable funds, have increased faster than inventions and the wages or money incomes of the mass of consumers. According to Dr. Foster, the nation has too many mills, mines, factories, foundries, canneries, oil wells, railroads, office buildings, and power plants. From 1900 to 1925 real wages increased 30 per cent, while productivity for employees increased 54 per cent. Thus the market has lagged behind production. And there is necessary a new combination of factors, higher wages and less saving and investment. Consumers do not get enough money from industry and government to buy all the goods that industry puts upon the market. This is a modern version of the old socialist theory of under-consumption, a one-sided version of the theory of maladjustment, of which the theory of over-production was another one-sided version. It seems to the writer that the Foster and Catchings theory of deficiency of consumer demand and the old classical automatic production-consumption theory are both versions of Davenport's law of the optimum proportion of factors. The deficient factor in the days of Mill becomes an excess factor in the days of Foster and Catchings; yet the

¹ Cf. *The Road to Plenty, Profits, etc.*

authors of both schools of thought seem to think that the relative proportion that prevails in their time is a universal secular trend. Both of these theories, although contrary to each other, seem to the writer as expressions of sound contemporary economic policy. They are simply the historic thesis and anti-thesis that can be subsumed under Davenport's universal law.

Another aspect of the classical theory that there could be no general over-production of economic goods is seen in the fact that the English economists from Smith to J. S. Mill paid little attention to the subject of consumption. This was probably due to the fact that up to that time the world had chronically suffered from shortages of vital necessities, so that the pressing problem was increase of production. A second aspect was the assumption of the economic man, the man who was interested first of all in economic results and whose desire for wealth was insatiable, the hedonistic calculator of Bentham—probably another theoretical product of the world's need for more economic goods. Now these theories and limitations of analysis are connected with the view that there can be no general over-production. Mill's idea was that however many goods there are, people will always want more; and under the adjusted production brought about through free competition the increased supply of all goods will be automatically exchanged through the markets; and men could go on indefinitely satisfying their expanding wants.

However, this generalization may be questioned from two points of view: that of the cost of production and that of the utility of consumption. To look at the matter from the production point of view: Mill himself recognized three distinct "forces" in economic life: (1) the pursuit of wealth and the antagonizing principles to this pursuit, namely (2) aversion to labour, and (3) desire of the present enjoyment of costly indulgences. Aversion to labour is thus seen as a neutralizing tendency to that of working for wealth or luxuries. Men may always want some more goods, but if they have to labour for them there may be a limit to the productive effort that creates

effective demand. The economists recognized this principle when they discussed the law of diminishing return from land. Cairnes speaks of the unlimited amount of work always to be done and of the limited possibility of doing it. "The work to be done is indefinite and practically unlimited: indefinite, as varying with human wants and desires; and practically unlimited, because always far in excess of what human hands can accomplish." . . . "A limit indeed there is—a very real limit—to the employment of labour in a limited area of country; but that limit does not lie in the quantity of social work, but in the productive power of the agents employed in performing it—in other words, in the increasing cost of production. The work is there to do, but the efforts needed to accomplish the work are greater than the product is thought to be worth."¹

This theory of the limitation of effective demand through the varying costs of production, as touched upon by J. S. Mill and Cairnes, was an anticipation of a more elaborate analysis from the point of view of consumption which was developed by the marginal utility economists. This subject will be considered again from the point of view of the marginist analysis, but it is clear that the remarks of the classicists on the subject of the cost of production threw distinct difficulties in the way of their own theory of the impossibility of a general over-production.

The theory of varying costs is also a complication for the classical theory. The principle of diminishing returns or increasing cost, as noted by Cairnes, checks effective demand arising from production in the extractive industries. It does not in the same way check effective demand arising from production in manufacture and transportation, the industries of increasing return or diminishing cost. The fact that the demand for the products of extractive industries tends to be rather inelastic in comparison with the demand for the products of manufacture again tends to offset the varying trends of costs in the extractive and fabricating fields.

¹ Cairnes, J. E., *Political Economy*, pp. 256-257, 262.

The whole concept of cost also is a complicated one. Costs, according to Davenport, may be human costs and money costs. They may be time costs, pain costs, opportunity costs, or money expense costs. Money expense costs may, again, represent human costs in the form of fatigue, boredom, monotony, or the nervous strain due to concentration of attention. From the point of view of human costs, increase of economic return sometimes necessitates a more than proportional increase in the expenditure of human effort. Examples of this are overtime work for the labourers in a manufacturing plant, and increased production on the farm. An increased output of 20 per cent in the production of a farm may mean an increase of the working day from ten to twelve hours, which may mean an increase in fatigue or of human costs of 30 to 40 per cent or even more. On the other hand, an increase in the output of manufacture may, under certain circumstances, involve no increase in human costs. If an automobile plant, for example, is operating at 50 per cent of capacity, and turning out one thousand cars per day, the production may be doubled with no increase of human cost. Twice the number of men may be employed, and no one works a longer day. In fact, efficiency may be increased with lessened labour cost per man through a greater extension of the division of labour. Moreover, production may be conceivably doubled without any additional human cost to the management. The analysis of the production department may not be more exacting when it leads to a policy of operating at 100 per cent capacity than when it leads to the policy of operating at 50 per cent capacity. The decision of the general manager to decrease or increase production, to lay off five thousand men or to employ five thousand additional men, may not necessitate any different amount of managerial time, judgment, or effort. In other words, there are certain classes of men in certain classes of industry, that is, men prominent in the field of large-scale industry, which operate according to the principle of increasing return, who do not suffer increasing human costs with increase of industrial

output; and they are the kind of men who by natural endowment or environmental conditioning can be more accurately classified in the group that Schänger calls economic men. It has been suggested repeatedly in this study that classical economic theory and more recent orthodox economics might be viewed as the theorizing or rationalization of or for this class of men. If this line of reasoning is true, the notion of the impossibility of general over-production may in course of time come to be regarded as a fiction like that of the Divine Right of Kings and Natural Law and Natural Rights.

According to the classical theory, then, demand for goods is insatiable and waits only on supply. But, according to the cost of production theory, supply is not indefinitely expandable. It may be so in industries of increasing returns, but is not so in industries of decreasing returns. In the case of personal and professional services, which function according to the principle of constant returns, a limitation of the increase of output is inevitable, because of limited time, fatigue, and the pressure of non-economic interests. Owing to the different ratio of cost increase in different industries, a rapid expansion of industry in general will cause maladjustment of production; and there is lacking the condition of free competition under which dynamic changes would soon be restored to the conditions of normal equilibrium.

Another reason for the limitation of economic production is the growing interest in non-economic activities—art, science, literature, sports, recreation. The wants of men are not all economic wants. Many activities are sources of satisfaction in themselves, but they require time, leisure, and energy, and these offer limits to the possibility of economic production. Out of this analysis there emerges something like a higher law of the normal proportion of factors, for the factors include non-economic as well as economic conditions. In other words, a correct economic theory will make proper allowances for non-economic interest in life; and the universal economic law, like the law of the proportion of factors, is a social law in

general. There is possible an integration among all the social sciences; and there is no conflict or disharmony such as that of the later classical dogma of the complete independence of economics and ethics.

There is, as suggested above, a relation between the classical theory of the impossibility of general over-production and the limited interest in the subject of consumption on the part of the classical economists. Economists recognize in theory two types of value: value in use, and value in exchange. Value in use has to do with capacity of goods for satisfying the biological needs or the personal wants of a particular person. Value in exchange has to do with the ratio of exchange between different kinds of goods on the market. The classical economists emphasized this latter aspect of value, since in an expanding era of trade and the division of labour men worked to supply the market rather than directly to satisfy their own needs.

Another difficulty in the classical assumption of an indefinite demand for goods is that it runs counter to the later theory of diminishing utility. This theory, as generally expounded, applies to specific kinds of goods. Does the theory of diminishing utility apply to all economic goods in general? Here modern economists are uncertain or contradictory. If the principle of diminishing utility applies to all economic goods, then there is a satiability of economic wants and a limit to effective demand for goods, just as there is a limit to effective supply in increased production costs. If the theory of diminishing utility in the case of all goods applies to most men but not to a certain class, and this class is the economic men or Verner Sombart's capitalists, then we go back to our hypothesis of economic theory as a rationalization of class attitude. If the theory of diminishing utility merely applies to specific kinds of goods and not to all goods in general, then the theory of diminishing utility is merely a poor version of the law of the optimum proportion of factors. It is an incomplete version in the field of consumption of the law of proportions, as the principles of increasing returns, decreasing returns, and

constant returns are inadequate versions in the field of production.

(The conclusion that is suggested by this line of analysis is that the Automatic-Production-Consumption theory of the classicists, the theory of the impossibility of general over-production, is purely a theorizing of an individualistic order. It is an expression of a competitive, entrepreneur, profit-seeking economy. In an economy based on production for use, for maximizing the welfare due to satisfying biological needs, and social, artistic, and scientific interests, and one in which there was a socially controlled harmony between economic and non-economic activities, such theories of expansion of production and of diminishing utility of specific economic goods will disappear in the one big problem of balancing interests and factors, and securing equality under conditions of high economic production and ample time for personal development and needs.) In the latter part of the eighteenth and early part of the nineteenth centuries, however, there was no such practicable alternative to individualism. Public or state control of industry was not at that time feasible, because industry was still carrying on, especially in the earlier period, the struggle by which it extricated itself from the restrictions and oppressions of medieval and feudal society. Individualism was the opposition to feudalism and paternal oligarchy. Only in the nineteenth century did the classical economics develop as a theory in opposition to the aspirations of labour, and change from a mainly liberal, democratic philosophy to that of one expressing the outlook of an upper and successful if not a privileged class, and representing rather a conservative than a liberal attitude. This classification of classical economics into early and later classicism, early classicism being characteristically liberal and later classicism conservative, is in line with the opinion of Sidney and Beatrice Webb, who estimate roughly that in its hundred years of supremacy capitalism (classical economics) justified its existence for the first fifty.

A final criticism of English classical economics may be made

from the point of view of a consideration of the influence of institutions on economic life. The mechanism of supply and demand of the market may determine immediately the economic issues of the time, but the institutions are forces that are back of supply and demand. The classical economists gave little thought to institutions, preferring to consider the individual man as the economic unit. Yet certain institutions were assumed, and these were probably very largely fundamental.

The classicists held rigidly to the institutions of private property and inheritance. They did this first as an incentive to industry and enterprise, and secondly as the most feasible way of creating the capital necessary for social progress. But the institution of inheritance fostered the inequality against which the early classicists reacted. It developed eventually that the inheritance of capital was as incompatible with equality as the inheritance of land. Thus the classical assumptions of free competition and inheritance were inconsistent with each other. And, finally, Cairnes' classification of workers into non-competing groups was an admission that the democratic ideal of the earlier economists was not feasible for the wage-earning classes under the accepted individualistic order. This actual inequality in the distribution of wealth under an individualistic order is clearly and simply stated by G. Lowes Dickinson:¹ "How is wealth distributed? The most important fact is the institution called inheritance. Because by virtue of that a man's opportunities depend on the wealth of his parents. If they are rich, he starts rich too; if poor, poor. The occupations that are best paid are available only to the sons of the well-to-do, for they require long training, which the poor cannot afford, together with many other things that attend on wealth, as powerful friends, good manners, and the like. The sons of the rich are thus predestined from their birth to work which is best paid or to no work at all."

Thus classical economics, which began as a middle-class

¹ Dickinson, G. L., *After 2000 Years* (London: George Allen & Unwin Ltd.).

reaction against a landed aristocracy, developed eventually into a theoretic justification of a capitalistic aristocracy. The classicists could not reconcile equality with the incentives necessary for maximum economic production. A more adequate economic theory awaited the development of modern psychology and sociology.

CHAPTER VIII

MARGINISM AND PECUNIARY ANALYSIS

POST-CLASSICAL economics may be classified somewhat arbitrarily into two main divisions: that which represents the development of orthodox economics, or that which tends on the whole to justify the present economic order; and that which reacts against the orthodox schools. If a continually changing process can be spoken of as an order, later classicism tended to justify the system of individualistic capitalism. Certain newer schools of thought, notably marginism, have also been characterized by some economists as a justification of things as they are. With the development of the Industrial Revolution industrial life becomes more and more complex, and economic theory comes to mirror different aspects of this complex process. The result is that different economists emphasize different aspects. Different theories tend to overlap, so that there is an element of inaccuracy and arbitrariness in any form of classification. The three classifications of post-classical economics which probably on the whole follow the orthodox trend are classified as marginism, pecuniary analysis, and the newer capitalism. All of these are related tendencies of individualism since the passing of the classical school. Marginism represents the approach to economic theory on the part of men of a theoretical or speculative bent of mind who have had training in mathematics or physics. Pecuniary logic is the reasoning of the theoretical economists who approach industry from the financial point of view. Newer capitalism is a name which may apply to recent economic changes as viewed rather from the point of view of engineering and technology.

The marginist economists represent a rather complicated movement. There are a considerable number of different economists in this school, and, as shown in Boucke's chapter

on marginism,¹ there is considerable difference of opinion among this group. One might classify the economists of this school as: (1) Early marginists or founders; (2) Economists who reconcile or make a synthesis of classicism and marginism; (3) Those who emphasize pecuniary analysis. Another classification might be: (1) Founders of marginism; (2) Critics of marginism. Particular economists overlap these divisions; and marginists themselves have been the most drastic critics of each other's systems. A logical classification of this school, however, is not necessary to the purpose of this study, since it is not a history of economic thought but a review of some phases of economics in quest of material for generalizations of wider validity than temporary precepts.

Later classical economics, especially in its central and most controversial features, was an attempt to solve the problem of distribution, from the point of view of production, of an analysis of production costs. This analysis led to generalizations of great practical usefulness for a certain period. But as time went on the peculiar conditions, the specific proportion of economic factors that justified the classical analysis, was passing away. Ricardian economics declined from the position of authority it had held for nearly half a century. The successors of the classical economists following J. S. Mill abandoned the wages fund theory. The labour value theory of Ricardo was adopted by Karl Marx in support of radical socialism. A destructive attack was made on English classical economics by the German historical school. The defence of classical economics by Cairnes and Keynes weakened rather than strengthened it. Shortly after the age of Ricardo the rent of English farms declined. After 1870, with the opening up of the agricultural lands in the Mississippi Valley and in Canada the rent of English farms fell still lower. The birth-rate in the more advanced countries of the west steadily declined. Population in France became stationary. In Ireland it actually decreased. Thus Ricardo's law of industrial progress as a universally valid

¹ Boucke, O. F., *The Development of Economics*.

formula was proved to be false. Wages rose and labour organizations grew in power in spite of the demonstrations of their futility by the classical economists. A new economic theory developed by Beatrice and Sidney Webb in *Industrial Democracy* appeared as an explanation of these actual changes. The need for protective factory laws became generally recognized. In the latter part of the nineteenth century English prosperity began to decline, even under a period of free trade. Large-scale industry began to develop in Germany and the United States. English industrialists began to feel the force of foreign competition. Production began to catch up with the world's demand for manufacture; and competition developed for foreign markets. The English manufacturers could no longer look forward to an unsatisfied demand for their products. With the rise of capitalism in other countries there developed a supply of capital from the United States, Germany, and France, so that capital accumulation on the part of the English enterpriser could no longer be assumed as inevitably a backward factor. So there was a need for a new economic theory or a modification of the old.

The marginist school of economists was one answer to this obvious need for a reorientation of economic theory. (They approached the subject of value and distribution from the point of view of consumption, of wants and feeling rather than from the point of view of the cost of production.) The marginist school developed from the addition of Bentham to classicism. Professor Mitchell has emphasized what he calls the different levels of analysis corresponding to our definitions of income in the economic text-books.¹ There is the money level or income in terms of money. There is the "real" income level, or income in terms of goods and services. And there is the psychic income level, or income in the forms of pleasures or satisfactions, the ultimate form of income. As Professor Mitchell has pointed out, economic theories can be classified according to the level on which economic analysis is carried out. The mercantilists

¹ Mitchell, W. C., Unpublished Manuscript.

emphasized national income in terms of money. One of the great contributions of Adam Smith was his deeper analysis of the subject, showing that a nation is rich when it possesses a large stock of consumable goods. At the same time the expansion of the Industrial Revolution brought about the need for increased capital in production, so that the classicists gave quite sensibly a higher valuation to producers' goods; and thus came to emphasize the materiality or accumulability of the goods that were made by productive labour. Thus the classicists emphasized production, and developed their theory of distribution and exchange from the point of view of production. Bentham, however, approached the subject of social science from the point of view of wants and feelings. Hence after Bentham the theory of utility would be the subject next in order to be taken up by the economists. Bentham reduced the motives or fundamental drives in economic life to the desires to secure pleasure and avoid pain. These were the real forces back of economic behaviour. So that for theorists who accepted the Benthamite philosophy it was natural to apply this to the economic problem. This was just what happened in 1850 in the work of the German writer Gossen, and then in the eighteen-seventies the utility theory was developed almost at the same time by Jevons in England, Menger in Austria, and Walras in France.

The founders of marginism were a group of scholars, "of theoretical men," who were interested in making economics an exact science, and whose training was characteristically in mathematics, physics, and logic. The social scientists of the eighteenth century were trying to make social studies into exact sciences after the analogy of what physics and chemistry were supposed to be. (Bentham and Mill had tried to put morals on a measurable scientific basis; Jevons, Gossen, and Walras tried to do the same thing for economics.)

Thus marginism represents an approach to the problem of distribution from the point of view of an analysis of consumption by men trained in logic and mathematics. A different light

was or is to be thrown on the whole field of economics through an analysis of consumption by men trained in biology and bio-chemistry, as well as in psychology, sociology, and anthropology. The general subject of how men make a living, amass wealth, and divide a joint product with their fellows is sufficiently intricate, so that contributions can be made by men who have all kinds of talent and the training and insight that come from nearly all of the special disciplines.

Given, then, their mathematical ability and preference for exact measurement, marginal analysis becomes a mathematical presentation of the felicific calculus of Bentham. Pleasure, pain, labour, value, utility, wealth, are notions admitting of quantity. Jevons¹ simplifies Bentham's theories so as to get a mathematical version. We cannot measure the pleasures and pains of alternate courses of action. All that is necessary for a psychological basis of a theory of value is to tell which of two pleasures or pains is greater. Jevons imputes to the mind the ability to discriminate relations of equality or inequality among different situations involving pleasures and pains. Man is supposed to know whether the satisfaction he gets from an additional bit of a commodity is greater than or equal to the labour pain which the act of production will cause.

Thus this mechanical, plus and minus, profit and loss psychology enabled the economists to translate market demands into quasi-geometrical figures, and to give to economic analysis the appearance of an exact science.

Economists to-day differ as to whether the marginists as a class are orthodox or radical, whether their theory should be classified as science or rationalization. The classical economist's solution of the problem of value and distribution has been treated in this study as mainly the rationalization of a class interest; although a subconscious rationalization may approach the dignity of science if that class is making valuable contributions to progress. Was marginism the rationalization of a class interest? In other words, was it the expression of the

¹ Jevons, S., *The Theory of Political Economy*.

unconscious wish? Or was it the product of traditional modes of thought or habits derived from a special discipline? Or finally, is it to be classified as impersonal analysis and problem-solving thought? Of course, the question cannot be decided. An economist cannot psycho-analyse the dead, or even the living. And various economists express tentative and contradictory opinions. Some of the radically-minded look upon marginism as an attempt of the discredited orthodox post-Ricardians to erect an effective opposition to Marxian socialism. Ricardo adopted a specific theory of causation, that is, one economic factor functioning as cause, and the other factors as effects. Labour created capital; and labour and capital created economic goods; hence labour was the cause and measure of economic value. (Marx held to the logic of the classical analysis of value; that is, if labour produced all wealth, it should receive all wealth. The marginist analysis, which ascribes all value to utility, which makes value independent of labour, and relates labour pain to value only indirectly as a cause of scarcity, completely undermines the assumption of the Marxian socialists.) The question at issue is whether marginism was a revolt from classicism or merely a new basis for a justification of individualistic capitalism. Gide and Rist suggest the orthodox conservative view.¹ The marginists were "a school that is essentially neo-classical and pretends nothing more than to give a fuller demonstration of the theories already taught by the old masters." This view, however, the authors dropped two pages farther on. "The main object of the equilibrium and final utility theories is not to justify the present regime, but merely to explain it."² The more objective and scientific view seems to be supported by the biography of the founders of marginism. Of the four chief founders of marginism—Jevons, Gossen, Menger, and Walras—three, Jevons, Gossen, and Walras, were mathematicians. Jevons came from a dissenting family. He was a zealous, self-supporting student, and later

¹ Gide and Rist, *History of Economic Doctrines*, p. 537.

² *Ibid.*, p. 539.

a college professor. He was interested at different times in botany, chemistry, meteorology, mathematics, economic statistics, economic theory, and logic. He rejected a promising business opening for the life of a college professor. He seems to have been a man of scientific and intellectual passions rather than a reformer, a propagandist, or an economic man, in the sense of the classical assumption.¹ Gossen was a public official, a "royal Prussian Government assessor." Leon Walras was Rector of the Academy of Lausanne. These men seem to have been "theoretical men," doctrinaires, men of intellectual interests, not practical or "economic men," like Ricardo, the successful stockbroker and speculator.

In view of these biographical data it seems hardly possible to maintain that the marginalist economists were conservatives, trying to preserve class or group privileges by means of clever rationalizations. This view, if it were true, would not of course assume that the rationalization was conscious. (Yet the charge or the implication of rationalization remains; or there is an assumption that the marginists at least strengthened the weak links of the classical theory, and thus re-established a system on the basis of which business men and idle capitalists could find a social justification for their personal ambitions or their defence of their privileges. G. Lowes Dickinson observed,² "The science of the distribution of wealth shows by mathematics how necessary it is that everything should be just as it is.")

The implication of this and similar observations is that the marginists were seeking a better justification for the system of individualistic capitalism than that of classical economic theory, and hence that their work falls short of the objectivity necessary for problem-solving thought. Or, if all reasoning in the field of the social sciences proceeds from certain assumptions or postulates that are rooted in personal or class valuations, then marginist economics is a sort of concealed, quasi-scientific, formal apology for a modern economic aristocracy. The author

¹ Mitchell, W. C., Unpublished Manuscript.

² Dickinson, G. Lowes, *After 2000 Years*, p. 21.

of this study, however, thinks it possible to combine a detached scientific interest and a system of thought which in its practical results tends to justify unearned wealth and economic inequality. The fundamental point of contact between classicism, marginism, big business, and modern practical politics is the materiality or accumulability of the concept of wealth, or the notion that the subject of economics is wealth and not human welfare. This is the assumption of the classical economists who rated the wealth of nations in terms of physical products and of the modern pecuniary economists or financiers who estimate national or individual wealth in terms of money. The same assumptions are made from occupational necessity by the mathematicians, for mathematics deal with quantities rather than with qualities; and so, whether the professors of mathematical economics like it or not, they find themselves in the same boat with the plutocrats. The gist of this view is that economic theory can best be classified on the basis of what Mitchell calls the "four levels of economic analysis," which correspond, at least in part, to the different conceptions of income: (1) the money level, (2) the goods or physical product level, the "real income" level, (3) the psychic level, and (4) another version of this, a sort of aggregate psychic income, which is often called the welfare level. Now economic theory which sticks to the first two, or the more superficial levels, is conservative economic theory. On the basis of it one may submit a logical justification of our present individualistic order. Hence classicism, marginism, and the newer capitalism are conservative types of economic theory. They rest on the assumption of the ultimate validity of the quantitative analysis, in terms of money, in terms of various measures of physical quantity, or in terms of the most abstract measures of quantity—mathematics. It makes no difference in the final effect of the labours of the marginalist economists whether they were at heart democrats and dissenters or clever fighters for aristocratic privileges. They were conscious, or more likely unconscious, conservatives by occupational necessity.

And almost is the mind in me subdued
To what it works in, like the dyer's hand.

The liberal or radical economists, who will be discussed later as groups, namely, the welfare economists, the institutionalists, the socialists, and the communists, all approach economic phenomena on another level of economic analysis. Their approach is not through mathematics but through psychology. Their standard is less quantitative and more qualitative. ✕

In many ways the marginists followed the classical tradition. They employed the deductive method. There was no attempt at statistical verification; and in the early stages little critical analysis of postulates. The marginist accepted practically all of the assumptions of the classicists—static conditions, freedom of industry, mobility of capital and labour, a *laissez-faire* individualist order, the purpose of the individual being private profit, gain through adjusting production to a price market, unrestricted right of inheritance, exchange through the medium of money, a purely police state, hedonistic human nature, the entrepreneur as the pivotal factor in industry and the class chiefly responsible for industrial progress. In all these respects the marginists in their postulates and presuppositions were at one with the later classical economists. (Another additional assumption, as Hobson has pointed out, was the indefinite divisibility of the factors of production and the articles of consumption. Marginism thus developed into a static, entrepreneur analysis of the problem of value and distribution.) The assumption that the entrepreneur function was the backward or most expansible factor was one in which they were in agreement with the later classicists. This implied several other assumptions, which seem to have been the actual conditions of the time—an individual economy, capital accumulation based on individual savings, invention proceeding faster than the accumulation of loanable funds, and production in the field of manufactures not yet adequate to the world demand for manufactured products. This again implied—that which was

actually existent—vast unexploited natural resources, such as those of North and South America, South Africa, Australia and Siberia; a growing world population or mass of labour to be organized (the population of the world doubled during the nineteenth century); and finally, an expansible or buoyant market for machinery or producer's capital.

(The chief point of departure from classicism was the attempt of the marginists to explain exchange value by states of feeling or consciousness rather than from the point of view of objective physical commodities. There developed a subjective interpretation of the distributive shares of the factors of production.) The marginist theory of wages comes to be a subjective mathematical theory, a matter of the balancing of the utility of goods gained by the last hour or unit period of labour against the disutility of labour, labour pain, in the last hour or unit period of labour. Interest as a distributive share also received a subjective, psychological interpretation. Interest was explained as due to time preference, to the greater present utility over future utility of an object rather than from the point of view of the technical superiority of the roundabout capitalistic method. The objective technological explanation is superseded by the subjective time-preference explanation. The emphasis is shifted from the classical conception of cost of production to the marginist conception of utility. On the other hand, profits remain residual in line with the classical tradition. The other distributive factor, rent, was the one over which the marginists eventually made the greatest break with classicism and probably their outstanding contribution to economic insight. From the consumption point of view the marginists developed one generalization which may possibly be universally valid—the law of diminishing utility.

The marginists encountered serious difficulties in reconciling their subjective approach with their purpose of making economics an exact measurable science. Their problem was to explain objective exchange value, or market value. Their approach was from the subjective or utility side. The classicists

had distinguished between value in use and value in exchange. The marginists were confronted with the problem of shifting from use values to exchange values; in other words, from psychology to commerce, from utility to the market price. The difficulty was to secure a standard or common denominator for subjective valuations. This was finally done by translating conceptions of utility and disutility into a money standard. The Austrians distinguished *Wert*, or subjective value, from market or exchange value. Subjective value, or *Wert*, is "that importance which a good or complex of goods acquire for the well-being of an individual." That is, men find by common-sense experience that there is a causal relationship between certain material objects and the satisfaction of their wants. This is the proper subject for scientific analysis through the study of bio-chemistry. But men trained in abstract mathematics and logic have no means of approach to this problem. Different people have different feelings about the same things. The same person has different feelings about different things, and different feelings at different times about the same things. How can anyone translate these subjective valuations into an objective measurable standard? "Can whimsies be subjected to appraisal so as to stand in mathematical relations to beauty, agreeableness, or sweetness—this person or thing one and one-half times as beautiful or as beloved as another?"¹ The marginists at this point encountered an almost insuperable obstacle, which they cleared by a bold metaphysical leap, and translated all possible subjective and qualitative personal valuations into the objective, quantitative form of money.

In other words, the marginists started out from subjective, capricious, and so far unmeasurable use value. Not having the training or the instruments for measuring subjective valuations, they make the broad assumption that money measures individual utilities and disutilities; and that market price in the form of demand and supply represents the summation of all personal utilities and disutilities; and that these averages of satisfactions

¹ Davenport, H. J., *Economics of Enterprise*.

and dissatisfactions are measurable in terms of money. At this point the material of economics becomes susceptible of exact treatment by trained mathematicians. Mass utilities and disutilities are translated into demand and supply schedules, and the condition exists for a mathematical presentation of the industrial process that is concerned with value and distribution through the mechanism of the market.

At first the subjective of utility approach seems to be a deviation from classicism; but later economists, notably Marshall, effected a higher synthesis of classicism and marginism—and founded what has been called the neo-classical school. The first steps toward this reconciliation were made by Jevons. He started out to prove that all value was based on utility. The study of utility led to an analysis from the point of view of the law of diminishing utility. And the law of diminishing utility made clear the relation between marginal utility and supply. The classicists based supply on the cost of production. Hence Jevons' final formula. Cost of production determines supply. Supply determines the final degree of utility. The final degree of utility determines value. Hence both utility and cost of production determine value. The more complete analyses reconciled the classical school and the marginists, eliminated the labour theory of value and Marxian socialism, and even-tuated in neo-classicism or modern orthodox economics.)

So much for assumptions, methods, and difficulties in the way of marginal analysis—what they were trying to do and how they did it. The next topic is critical evaluation of their work, first their positive contributions, and secondly their limitations and failures. First, their positive contributions: under the head of achievements of the marginal school there will be treated the subject of economic causation, the laws or principles of diminishing and increasing returns, and the subject of the Ricardian theory of rent.

Up to the time of the marginists the schools of economic theory had in the main operated according to the notion of specific causation, that is, the idea that one economic factor

was of fundamental importance so that it could be taken as the cause of the other economic factors. This monistic economic philosophy was in line with the philosophical and theological monism of the eighteenth century, the Deism or Theism of theology and the monism of German metaphysics, in contrast to the pantheism or pluralism of later philosophy. The mercantilists held that gold represented economic value, but considered gold as the commodity which embodied the most important effect of labour. The physiocrats ascribed value to land; the classicists and Marx to labour. (The marginists in reconciling classicism and marginism attributed causation to co-ordinate factors, demand and supply, or demand, supply and price, and these factors were aggregates of various independent and varying elements. Value was partly due to demand; but back of demand were all the conditions that make for human wants—organic needs, desire for variety, and love of distinction. Value was also determined by supply. But back of supply were the quantity and quality of land and natural resources; labour or population; quality of the people, such as health, strength, hope, and ambition; industrial training; trade; the money economy; industrial organization, the division of labour; regional specialization and large-scale production; industrial co-operation—all the factors in the physical environment, man, and material culture which have a bearing on the efficiency of production. Back of the price level are the quantity of gold and silver, government currency, banking and credit—all the environmental and human and institutional and cultural factors that determine the price level.¹ The evolution of marginal analysis is in harmony with the modern theory of causation.) One thing is not thought of as a cause and another as an effect. The modern idea of causation is that of an interplay between a complex of varying, interrelated factors, each of which is both cause and effect to all the others, and all of which are in a relation of continual adjustment and readjustment. It is evidently to be seen that the notion of specific or

¹ Marshall, Alfred, *Principles of Economics*, books iii, iv, v.

single causation is related to the static analysis; the theory of multiple causation is a phase of dynamic analysis. Marshall, in conforming to the modern idea of multiple causation, was departing from the initial static assumption of the early marginists, and was functioning rather as a critic than as an exemplar of marginal analysis.

Another valuable contribution of the marginist school was their critical analysis of the laws of increasing and diminishing returns and their recantation of Ricardian rents. Among the economists who have contributed to this late critical phase of marginism reference is made especially to Wicksteed, Fetter, and Davenport.¹ The inadequacy of the classical formulation of the law of diminishing returns is due, according to Wicksteed, to the assumption that the factor land is constant (and, we may add, the conception of specific causation). "In stating the law of diminishing returns, it is assumed that the factor of land is constant, and if, when a number of factors co-operate to produce a result, you double some of them without doubling others, of course you cannot expect to double the result. If you double the pastry without doubling the apples, you do not double the pie. If you double the diners without doubling the dinner, or double the dinner without doubling the diners, you do not double the dining experience. In like manner, if you double the land without doubling the operations on it, or double the operations without doubling the land, you cannot expect to double the crop. This principle would apply to manufactures just as much as to agriculture. If, for example, you had doubled the number of hands, retaining the same machinery and buildings, or if you doubled the raw material without doubling the labour bestowed upon elaborating it, or if you had doubled the labour bestowed on the same raw material, you could in no case expect the exact doubling (or other proportionate increase) of the product. Or if a tradesman doubles his accommodations without doubling his stock and

¹ Wicksteed, P. H., *The Common Sense of Political Economy*; Fetter, F. S., *Economic Principles*; Davenport, H. J., *Economics of Enterprise*.

staff, or doubles his stock without doubling his accommodations and his staff, he will not double the effectiveness of his whole establishment. There are circumstances under which any of these operations might more than double the total result. If a business were desperately under-staffed or under-stocked, for instance, doubling the defective factor might more than double the effect of the whole; but if doubling any one of these factors without doubling the others exactly doubled the efficiency of the concern, it could only be a coincidence; and 'after a certain point' it would certainly less than double it. The 'law of diminishing returns', then, is really no more than an axiomatic statement of a universal principle that applies equally to all forms of industry, and to a great range of non-industrial experiences and phenomena as well."¹ "The law of increasing returns, then, is an intelligible formulating of a very interesting and important phenomenon. Production on a large scale makes certain economies possible. A man who is cultivating fifty acres of land may require a wagon, but if he were cultivating two hundred acres he might only require two, not four. And if, instead of supposing one man to increase his holding, we imagine four holders of fifty acres each to be working in co-operation, we may still suppose the same economy to be effected. Or, without any 'co-operation' in the technical sense, a man may own a steam threshing machine, and may do the threshing for all the farmers and holders in the neighbourhood more economically than they could do it for themselves; but it is only if there is a great deal of wheat grown in the district that this can be done. No limit seems yet to have been reached to the possibility of economizing in one direction or another as the bulk of any industry increases. It seems always possible, at every stage, to introduce some new process of specializing or division of labour, and so to effect some new economy for which the industry was not ripe until it had reached its present dimensions. And note that the phenomenon we are now examining is independent of the question how far the business

¹ Wicksteed, P. H., *Common Sense of Political Economy*, pp. 528-9.

of a single concern, or under a single management, may be carried advantageously. The economies which a large volume of production, as such, renders possible are in principle independent of the question whether the industry is in few or many hands."¹

If, then, the principle of diminishing return under certain conditions may apply to all industries, and the principle of increasing return under certain conditions may apply to all industries, Wicksteed's analysis prepares the way for resolving the principle of increasing return, the principle of diminishing return, and also the principle of constant return into the law of normal proportion of factors. This critical analysis of the assumptions back of the Ricardian theory of rent, namely, that rent is based on the law of diminishing returns, and the law of diminishing returns applies only to land, opens up a method of overthrowing the Ricardian theory of rent, or including it in a higher synthesis (According to Wicksteed, Ricardo's theory of rent was based on the fact that Ricardo took land as a constant. If land is taken as a constant, and more labour is applied to the same amount of land, the result will be a larger rent per unit of land, and a less wage per unit of labour. But if labour were taken as a constant, and more and more land were combined with the same labour, the result would be a lower rent per unit of land, and higher wage per unit of labour. In the typical graphic presentation of rent by the mathematical economists² "rent appears as a mixtilinear area and wages as a rectilinear one. Had we thought in terms of less or more land under the same cultivation instead of more or less cultivation bestowed upon the same land, we should have found wages represented by a mixtilinear area and rent by a rectilinear one.") (Wicksteed develops this further in hypothetical cases in his chapter on rent. The upshot of the whole analysis is that there is no fundamental difference in any of the factors of economics, so that the law of the proportion of factors can be taken to

¹ Wicksteed, P. H., *Common Sense of Political Economy*, p. 529.

² *Ibid.*, p. 551.

supersede the separate formulations as to wages, interest, profits, or rent.) In the words of Wicksteed, "Everything that we read in economic books as to the pure theory of distribution, whether it refers to wages, interest, rent or profit, is either false when asserted under the category under discussion, or else true of all the others as well."¹

¹ In other words, rent, interest, profits, or wages are distributive shares which follow the same principles, the shares going to productive factors according to the working of supply and demand, which is the individualistic, *laissez-faire*, money-market mechanism for approximating the law of proportions. Each factor which is relatively scarce by reference to the demand or the production conditions of the times gets a higher imputation of value, and a larger money inducement so that the proportion may be attained. Any specific portion going to a landowner or a capitalist, a business manager or a worker might be designated rent, interest, profits, or wages indifferently. The principles would be the same, the force of demand, and abundance or scarcity. The return to better land in excess of the poorest land might be called rent (or all payments for the use of land might be called rent). Payments to workmen who earn more than minimum wages might be called the rent of labour efficiency. If minimum salaries for a university professor were three thousand dollars, a professor who drew a salary of six thousand dollars might be said to draw a rent of professional ability of three thousand dollars. If the salary of railroad presidents range from thirty thousand dollars a year up, a railroad president who received one hundred thousand dollars a year might be said to receive a seventy-thousand-dollar rent of executive ability. If one business manager who is termed the marginal entrepreneur earns merely enough to pay the wages he could earn on the market as a hired executive and enough to cover his insurance and uninsurable risk, and another executive in the same situation could earn one hundred thousand dollars a year in excess of these deductions, the second might

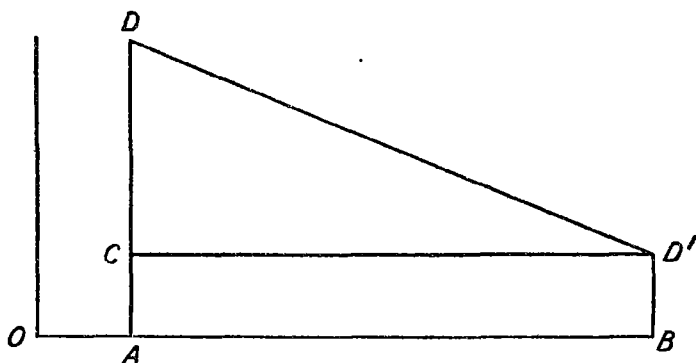
¹ Wicksteed, P. H., *Common Sense of Political Economy*, p. 574.

be said to earn a rent of ability of one hundred thousand dollars.

Again, the term profit might be applied to any differential return coming from efficiency or scarcity. Returning to the former illustration: if the minimum salary of a university professor were three thousand dollars, a professor who drew a salary of six thousand dollars might be said to draw an efficiency profit of three thousand dollars. If high-school graduates on an average earn two thousand dollars a year, and college graduates on an average earn four thousand dollars a year, the college graduate who earns six thousand dollars might be said to draw two thousand dollars as efficiency wages, as rent of ability, or as profit from his investment in a college education. (The fact that the distributive shares are given different names by economists does not alter the fact that all the shares operate according to the same general principle. The static analysis is justifiable only from the point of view of the deficient or limiting factor. If land is scarce and population growing, one can justify or account for the Ricardian analysis. If population and capital are scarce relatively to land, as in the American colonies, you would have a reverse formulation from that of Ricardo; and wages would be high and the rent of land low. In line with this static assumption the classicists and marginists assumed different factors as residual claimants in the distributive process. The constant factor, or that which increases more slowly than the others, is the residual factor in the economic analysis.) In the case of Ricardo good land was the constant; rent was residual, and increased with the expansion of the other factors. Under colonial conditions labour could be considered as the backward or deficient factor in the industrial complex, and wages would be residual as more capital was applied to better land. In the expansion of manufactures in the nineteenth century industrial enterprise and managerial skill could be the backward or limiting factor, and profits could be considered residual, and would increase with the growth of population, inventions, and natural resources to be exploited.

(The choice of the residual factor in the economic analysis might be a reflection of careful observation of contemporary conditions. As such it would be a valuable economic precept or generalization useful for a limited period or as long as the existing proportion of factors remained. But the critics of marginism have given a universal formulation in the law of the normal proportion of factors.)

A. RENT OF LAND



DD' = demand curve for capital and labour.

OA = scarcity of capital and labour relatively to land.

OB = abundance of capital and labour relatively to land.

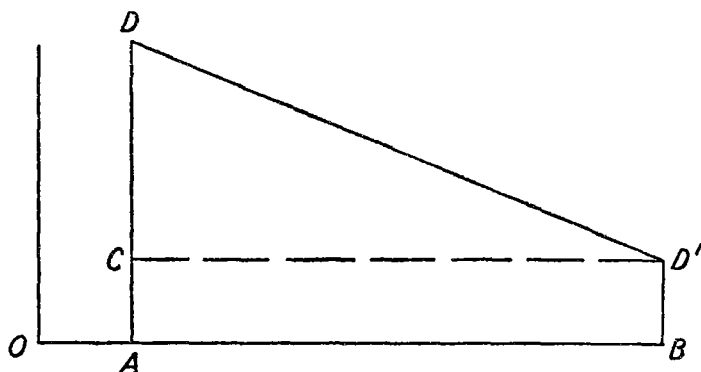
BD' = application of capital and labour to no-rent land.

$CD'D$ = rent or landowner's surplus, due to relative scarcity of land.

(Assumption: One factor static, the others dynamic or increasing. The static factor gets rent—the pay for relative scarcity. Rent factor is disproportionately small; others, large. Norm: balance or equal relative scarcity of all complementary factors.)

Note.—At OA land is relatively abundant, and capital and labour relatively scarce. At OB , because of increase in capital and labour, land becomes relatively scarce. Rent is the differential payment for the relatively scarce factor.

B. RENT OF MANAGERIAL ABILITY



DD' = demand curve for management.

OA = few able managers.

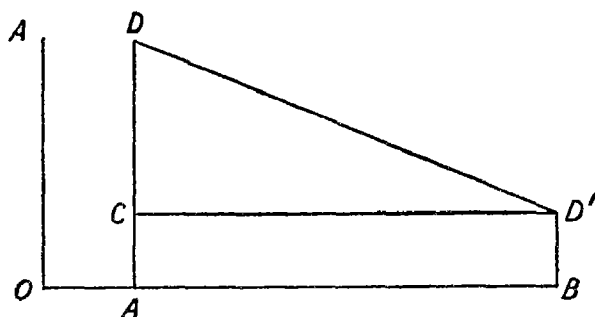
OB = many able managers.

AD = demand for marginal managers (scarce supply).

BD' = demand for marginal managers (abundant supply).

$CD'D$ = rent of managerial ability due to relative scarcity of able managers in comparison with need for managers due to abundance of the complementary factors of capital and labour.

C. RENT OF LABOUR



DD' = demand curve for labour, due to land, capital, and management.

OA = scarcity of labour relatively to land, capital, and management.

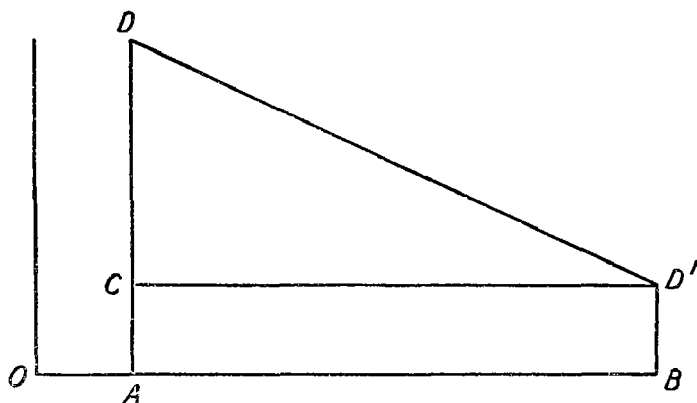
OB = abundance of labour relatively to land, capital, and management.

AD = demand for marginal labourers under conditions of labour scarcity.

BD' = demand for marginal labourers under conditions of abundance of labourers.

CD'D = surplus wages or rent of labour due to scarcity of labour relatively to the other, complementary factors.

D. RENT OF CAPITAL



DD' = demand curve for capital, due to land, labour, and management.

OA = scarcity of capital relatively to land, labour, and managerial ability.

OB = abundance of capital relatively to land, labour, and managerial ability.

AD = marginal demand for capital under conditions of scarcity of capital.

BD' = marginal demand for capital under conditions of abundance of capital.

CD'D = saver's surplus, or rent of capital due to scarcity of capital.

So much for differential returns, or for variations in the rate of return to different economic factors due to a varying volume of supply and varying volume of demand for specific factors. (If there were a fully efficient automatically self-adjusting economic system or a fully efficient system of central planning and control, the different complementary economic factors would be held in the same proportion of relative scarcity or abundance. In that case each factor, or the legal owner of each

factor, would be remunerated according to the productive efficiency of the factor. Or, if specific productivity could not be determined, the sum of the co-operation of all the productive factors would be distributed to individuals according to some formula of social welfare.) There might be equal or differential distributive shares; and the shares could take the form of money payments or rights to social, intellectual, or artistic privileges. But there would be no need to designate the shares as rent, interest, wages, salaries, profits, dividends, etc., as these terms would then be recognized as traditional terms for groups receiving income, but not terms which imply the operation of separate economic laws. (The only law involved which operates in the case of all the economic factors would be the law of proportions.)

In criticizing the marginist analysis the author takes the social point of view. How far would a public policy based on the marginist analysis promote the general social welfare? It will be noted that the evolution of marginist theory has tended to reduce economics to a pecuniary scale and measure. How far is this pecuniary standard valid as a measuring-rod for ultimate values? To take up a consideration of economics from the point of view of the three income levels, marginist analysis explains how total demand and supply are equated on the market. Back of demand there are human wants or desire for utilities. Back of supply there is limitation of quantity due to disutilities and difficulties in production. Both utilities and disutilities are translated into terms of money. Can we translate these money measures, this financial equilibrium of the market, into the ultimate psychic forces of human satisfactions and dissatisfactions, so as to see whether the financial equilibrium of the market is coincident with the maximum human satisfaction and the minimum human dissatisfaction, or the maximum human welfare that is attainable through economic goods? In other words, can one translate the superficial money income into the more significant real income and into the ultimate psychic income?

It is highly probable that this result could be realized under certain conditions. One of these is an isolated individual or family economy, such as frontier conditions in the United States. Here we will assume that the parents or head of the family have the welfare of the whole family at heart. On a small scale this would be an example of complete social solidarity. Here the same person is both producer and consumer. The utilities from the goods produced and the disutilities of labour are measured by the same mind. What measure the mind uses we do not know; but it may not be unreasonable to assume with (Jevons that the mind determines ratios of equality and inequality between sacrifices involved in different kinds of work and the utility secured from different kinds of goods.) Here effort will be directed to the production of different kinds of goods—food, housing, clothing—in proportion to a budget established roughly by the pressure of organic needs. If the family needs are fairly well met, there may be also a rough estimate of the point where further economic activity can be advantageously abandoned in the interest of non-economic activities such as hunting, fishing, and social recreations. The marginist law of diminishing utility and the marginist law of fatigue might be fairly accurate descriptions in this type of economy; for the same utilities and fatigues would be reduced to the one common denominator of the same mind. In other words, the marginist analysis, although it cannot be translated into mathematical units, may be a fairly accurate account of affairs in the frontier self-dependent economy. But theoretical marginism was not developed in this background. Marginal analysis attempts to justify or at least explain a condition of “social constitution,” a highly complex, interdependent society in which men specialize and exchange through the market. English *laissez-faire* individualism is a form of involuntary, unconscious co-operation, with supposedly automatic adjustment, the mechanism of supply and demand operating under conditions of free competition and mobility of capital and labour to achieve in the “long run” and under “normal”

conditions a state of economic equilibrium, in which there is conformity to the law of the best proportion of factors, and in which producers are rewarded in proportion to their contribution to the social stock of goods and services. This ideal of orthodox economics was to be realized through a system of specialized production for exchange. And this exchange was to be effected through the medium of money. The marginist theory as exemplified in the frontier economy did not have these complications of the pecuniary system and the market exchange. Production and consumption were both maintained on the same human psychic level and were measured in the same mind. In the real market exchange utilities and costs are first translated into money, and more than one mind enters into the process of exchange. One man is producer, and another consumer; one man is a buyer, and another is a seller. How can one secure equilibrium between marginal costs and marginal utilities under these conditions? If people were all the same in productive power and in sensibility, their estimate of costs and utilities would be made on a comparable basis. One mind would make the same total estimate as another. And if all people had the same amount of money, the marginal utility of money would be the same. But people differ in efficiency, in endurance, in sensibility, and still more in incomes. The whole theory of marginal utility, when translated by market necessity into the pecuniary standard, degenerated into marginal price offer, which is an entirely different thing from marginal utility.

But to continue illustrations of cases in which the marginist analysis might or might not apply, Marshall gives an illustration of a simple case of balance or equilibrium between desire or effort when a person satisfies one of his wants by his own direct work. "When a boy picks blackberries for his own eating, the action of picking is probably itself pleasurable for a while. And for some time longer the pleasure of eating is more than enough to repay the trouble of picking. But after he has eaten a good deal, the desire for more diminishes; while the task of picking begins to cause weariness, which may indeed be a

feeling of monotony rather than of fatigue. Equilibrium is reached when at last his eagerness to play and his disinclination for the work of picking counterbalances the desire for eating."¹ The marginal analysis might also apply in the case of a housewife who had two thousand dollars to spend on her family. Here, under the principle of diminishing utility on expenditures for a single type of goods, she would so diversify as to secure the largest family benefit for the money; and if she were a good economic woman, so distribute her expenditures that the last nickel, dime, or quarter would bring an equal return if spent or put into a fund to buy more milk and shoes, furniture and meat, hats and underwear, bedding and disinfectants, medical services and toys, rugs and candy. Moreover, if she and the rest of her family have equal wants and sensibilities with other families, then other housewives with two thousand dollars to spend will get theoretically the same utilities for their money. There is no discussion at this point as to the equality or inequality of the disutilities by which the husbands of these housewives secured the two thousand dollars. But that problem has to be met before the marginal analysis is justified as a standard of social welfare.

Take another case from the producer's point of view. A dairy farmer sells milk and buys a Ford car, and the worker in the Ford plant buys dairy products. Does the disutility of farm work and factory work balance, and the utility of a motor-car and consumption of food balance? The very question shows the impossibility of an exact or mathematical answer under our present knowledge or lack of knowledge of physiology, nutrition, and psychology. If the two producers are the same type of men and earn the same wages and have the same-sized families to support, their exchange is probably approximately of equal benefit to both. Marginal utilities in this case might be approximately equal even under the market conditions when producers are different persons. But in the case of a corporation lawyer who bought a Cadillac car, and the wage-

¹ Marshall, A., *Principles of Economics*, p. 331.

earner who works in the automobile factory, does the marginal utility to the owner of the car just equate the marginal disutility of the worker in the factory? That seems highly improbable. Does the marginal enjoyment of the consumers of coal and silk and pearls and the services of palace hotels just offset the marginal disutility of the coal miners, the silk weavers, the pearl divers, and the hotel service? Apparently they do not, because the producers are poor and the consumers are rich; the marginal utility of money is inverse to its quantity. In such cases there is no social equilibrium of satisfactions and dissatisfactions. Take the case of a labourer who makes thirty-five cents an hour and a business executive who earns one hundred thousand dollars a year. In the case of the labourer there may be a real balance of satisfactions and costs at the margin. The business man may enjoy his executive activities. He may secure a balance of satisfactions over dissatisfactions in the work itself. At the same time the pay gives a great balance of utilities over costs. The pecuniary demand for the business man's service may work out a balance in market demand and supply, may work out a kind of pecuniary market balance, but not a psychological balance of utility and disutility. In other words, the marginal analysis under conditions of inequality and exchange ignores producer's and consumer's surplus. It sets out to explain or justify value and distribution under conditions of exchange; and it turns out that the theory works according to the ethical principle of justice only under conditions where there is no exchange. In other words, under the marginist assumptions of actual conditions to be explained the theory is inadequate as a welfare analysis.) Thus the mathematical, deductive method becomes futile in concrete economic life, if one is concerned with social reform, and not merely the description of mechanism. In the words of Dr. Har, "All human relations fundamentally differ from mathematics. If you subtract five from five you get zero. But if you have loved a person who later turns out to be a serpent, you do not get zero, instead you get an increase of value through a

sharpened insight into human nature. The friend whom you have loved and lost still means something to you.”¹ Mathematics can measure money, and money can measure exchange value on the market. But neither money nor exchange value are measures of human satisfactions. Value or price emerges in human life only when there are obstacles in the path of enjoyment. The economics which deals with magnifying value is in opposition to the economics which aims to maximize human satisfactions. Human interests are forwarded by plenty rather than by scarcity, are antagonistic to value rather than in harmony with it. The ultimate goal of economic progress would be the condition of plenty, to which the mathematical limit would be free goods or the annihilation of value. Social economics aims at the utility of the aggregate, which is greater than the utility of the marginal unit multiplied by the number of units. The marginist concept fails to correlate price in the free competitive economy because it ignores producer’s and consumer’s surplus in private wealth and free goods; and because it ignores the non-economic values of art, science, and social life. The price economics fails to harmonize with welfare economics.

One of the most telling criticisms of marginism is that it conflicts with psychology.) The marginist developed from the hedonistic calculus of Bentham. But this type of psychology broke down during the latter part of the nineteenth century. Darwin’s *Origin of the Species* emphasized the importance of instinct and inherited patterns of behaviour. William James emphasized the importance of habit. Bentham also recognized habits, but traced them originally to calculated action which was often repeated. In modern psychology it is not held that habit was based originally on calculation. Most action is impulsive and unreflective. Most men do not weigh or measure or estimate in a detailed or mathematical fashion. Of course, there are some individuals who do—the architect, the engineer, the successful speculator or stockbroker, the analysis and

¹ Har, K. D., *Social Laws*, p. 58.

research man in investment banking. Ricardo was of this type, although very much more. And, if we are to trust biographies, John D. Rockefeller was something of an arch-type. But professional psychologists think that these men are exceptions. Present-day psychologists take it for granted that the hedonistic philosophy died and was buried before the end of the nineteenth century. The critic of the marginist method would say that if economics is to be based on psychology, that is, if psychology is to furnish the premises for an economist's deduction, the psychology chosen should be that of the latest and most authoritative school. This method Professor Fetter attempted to apply.¹ He wished to found economics upon a more scientific basis than the felicific calculus. Consequently he started with the instinct and impulse psychology. However, the system which was erected on this basis did not differ in many respects from that of his orthodox contemporaries. And Professor Whitaker² vindicated the old order by pointing out that the new psychology would harmonize with the old economic laws. Value, which had been based on diminishing utility, could now be said to be based on diminishing capacity to satisfy instinctive impulses. So there was not effected a revolutionary union of the instinct psychology and economic theory. But the instinct psychology was soon superseded by behaviourism, psychoanalysis, and the *gestalt* psychology. Habit largely takes the place that was formerly held by instinct. The difference is that an instinctive attitude could not be modified; whereas habits of long standing are almost as prepotent as the putative instincts, yet they are created anew in each generation. The modern psychology emphasizes conditioned reflex, and it holds that most people are conditioned and their character formed in childhood. Social progress is a process of unconditioning and reconditioning men in certain fundamentals. The application of this psychology to economic theory belongs to a later

¹ Fetter, F. A., *Economic Principles*.

² Whitaker, A. C., "Fetter's Principles of Economics," *Political Science Quarterly*, vol. xxxi, pp. 430-444.

chapter; but it is apparent that the marginist analysis has been rendered obsolete by the latest developments in psychology.

The modern emphasis on the plasticity of human nature, and the capacity for unconditioning and reconditioning, suggests that the philosophy of the economic man or the psychology of hedonism was not entirely without truth. This was perceived by Shānger when he spoke of the economic man as one of the six main classifications into which the varieties of human character could be grouped. The economic man concept as a partial truth is perhaps an abstracted and caricatured sketch of the successful capitalist-entrepreneur during that period of the Industrial Revolution when the individual proprietorship was the chief form of industrial organization. Werner Sombart¹ has speculated as to whether the capitalist created modern business or modern business conditioned the capitalist. His general conclusion seems to be that certain human variants or sports created the institution of modern business enterprise, and that this huge impersonal institution now selects or conditions or warps men into its own form. However this may be, it is true that during the rise of the factory system the individual proprietorship was dominant. Financial risks were all borne by the capitalist-manager. Then, as overhead costs gradually increased, conditions became such that single-minded devotion to pecuniary success was necessary for survival under the conditions. With the growth of joint-stock companies and corporations, financial risks became relegated to stockholders, and with the growth of the corporation management became specialized. Specialization of managerial functions and diffusion of risks make for the passing of the old type of economic man, the hard-boiled captain of industry. Co-operation becomes of increasing importance. The business is ours rather than mine. It induces in one a larger and more impersonal attitude. In other words, the modern industrial manager, being relieved of special risks, having to delegate responsibility, and learning to co-operate with his fellow-managers, comes to adopt toward

¹ Sombart, Werner, *The Quintessence of Capitalism*, pp. 345-346.

the general consumers, the stockholders, and the employees of the business an attitude something like that of a statesman. To illustrate this effect in modern industrial life one has only to refer to men like Carnegie, Ford, Owen D. Young, Henry Dennison, Edward Filene, George Eastman, and other well-known leaders of modern times. This shift from the atomic individualism of the economic man of the economists or the captain of industry of popular journalism toward a socialized or at least a corporate attitude belongs logically under subjects that will be dealt with in later chapters. The work of Bentham and the later classicists and marginists in the field of industrial psychology, then, was not entirely futile. They contributed to an understanding of a psychological type which is not universal, which is probably exceptional and of a small minority, but which was of great importance in the evolution of industry in the eighteenth and nineteenth centuries. Within the historic period in which free competition actually worked as a regulative force and when capital and labour were relatively mobile this type furnished constructive leaders of the industrial movement. But with the evolution of highly standardized economic institutions this type may become increasingly archaic, and may eventually be replaced by leaders of a different kind.

An interesting version of marginism is that presented by J. A. Hobson,¹ who represents a school of economic theory which is almost the obverse of marginism. Hobson actually inverts the assumptions of the marginists. (According to marginism, economic behaviour is rationalized by deliberating over the expenditure of the last increments of income, that is, marginal utility is based on marginal deliberation. What we do on the margin or with the last increments of income is the systematizing element in our behaviour. Hobson, however, maintains that the rational element in expenditure is that which is spent for necessities or in accordance with a budget or thought-out plan. The marginal or later increments of income

¹ Hobson, J. A., *Free Thought in the Social Sciences* (London: George Allen & Unwin Ltd.).

are those in which we experiment, sometimes profitably, in developing new modes of consumption, but much of the time involving waste or at least vague notions of return. The part of expenditure which is more rationally controlled is that which is within the margin and which is planned for in accordance with the family budget or the standardized cost account. The whimsical, uncertain, unpredictable part of expenditure is the marginal part.

The marginists made their analysis upon the assumptions of static conditions. Hobson, inverting this assumption, holds that people really deliberate about expenditures and outlays only under dynamic conditions. As long as the routine is unchanged expenditure proceeds according to the budget or the production plan. If a member of a family is sick, so that expenditures for health services exceed that of the budget allowance, then the housewife has to weigh and consider other items in the budget. The same takes place when there is a violent alteration in one's habit of consumption, such as changing from a pipe to cigars, from walking to a Ford car, or a Ford to a Buick. In other words, "When a static condition of a business or an industry, a family or a class standard of living is the subject of inquiry, the separate cost or utility of the marginal unit, were it ascertainable, would have no significance. The exact quantity (and therefore the margin) in each case is determined, in the causal sense, by the organic make-up of the business industry, or standard of living, as a whole."¹ (Thus, according to Hobson, deliberation is organic and at the centre rather than detailed and at the margin. The industrial genius is a creative artist rather than a mathematical calculator. So Hobson turns the tables on Jevons and the Austrians.)

One of the chief grounds of criticism against marginism, as also against classicism and neo-classicism, is that they furnish no grounds for solution of the labour problem or of hope for economic betterment of wage-earners. If a solution of economic

¹ Hobson, J. A., *Free Thought in the Social Sciences*, p. 130.

problems requires a rational analysis, that solution is available under the free competitive system only to the limited class who are shrewd or skilled in pecuniary analysis, in calculations in terms of money. The working man by nature or lack of training is a poor calculator. It looks as if marginism were a justification of the entrepreneur or the description of an institutional situation in which he rises to dominance. Wages are determined by the working of the law of supply and demand. Back of demand are wants, habits, purchasing power, fashions, the cost of production of the commodity. Back of supply are the productivity of labour, the scarcity or abundance of labour, the productivity of other factors of production and scarcity or abundance of other factors—natural resources, capital, skill of management, invention, the state of the mechanical arts. Any one factor is in a state of unstable equilibrium moving up and down under conditions of efficiency and scarcity relative to the efficiency and scarcity of all the other factors of production. Under these conditions the labouring class becomes helpless because they have not the insight and mobility which will enable them to secure the efficiency and scarcity necessary to gain a fair result from the automatic market adjustment.¹ Social evils of great seriousness result. The laws of the market do not direct a fair proportion of the capital of society into the field of investments of personal health, efficiency, and education. And society loses the potential talent of the working class, which Marshall estimates to be half that of the whole nation. What can the working man do in a short time under the free market conditions of supply and demand? Nothing can be done. In the long run, however, it is possible to restrict population and achieve a relative or equal scarcity with other factors of production; although, as Cairnes candidly observed, it is Utopian to expect this of the working classes.² Again, there is the possibility of education into a higher class, thus creating relative scarcity among the unskilled and poorly paid labourers.

¹ Marshall. Cf. *Principles of Economics*, book v, chapters iii, iv, v.

² Cairnes, *Political Economy*, p. 177, note.

Also government interference in the form of labour legislation and price- and wage-fixing is a possibility. But this involves the introduction of new institutions or the development of institutions which are contrary to the assumptions of free enterprise on the part of classicists, marginists, and neo-classicists. Thus on the admission of orthodox economics there is no hope held forth for the most numerous and the most needy group in modern society without denying the premises, and thus abandoning the system of orthodox economics.

In a previous analysis it has been pointed out that marginism might justify distribution provided everyone had the same income or had an income in proportion to his sensibility or power of deriving enjoyment from economic goods. But since these assumptions do not correspond to facts, the whole analysis of pleasures and pains, of satisfactions and dissatisfactions, or utilities and costs, boils down to a consideration of marginal price offers. (Demand means the amount of money offered for goods, and supply is determined by the money cost of bringing them to the market. Marginism as a human psychological analysis is attenuated to a pecuniary scale and standard.)

When marginism has developed solely into pecuniary analysis, Davenport's *Economics of Enterprise* carries other developments of the theory to its logical conclusion. This is an example of pure pecuniary analysis. Davenport purports at the start to give a purely impersonal description of an economic system. This system presupposes a certain institutional situation—individualism, free competition—a private, acquisitive, profit-seeking culture, the pecuniary valuation applied rigidly to all things. There is a redefinition of terms from the pecuniary point of view. Productive labour is any activity by which you make money. Capital is every property right which may be a basis for private acquisition. There is no attempt at valuation, ethical or aesthetic. There is no genetic institutional study. The institutional situation is accepted without criticism. (The marginal utility theory is reduced to the question of marginal price offers.) Market price is determined by the equilibrium of

demand and supply in terms of price offers. But every price offer presupposes two marginal price offers. The amount you will pay for one kind of goods is determined by the price you will pay for another kind of goods, through the opportunities for substitution. Hence the price of one good is determined by the price of all other goods. To explain one price you have to assume an organized system of prices. Hence (the explanation of prices in terms of other prices is a process of superficial and circular thinking.) By developing the theory of the simultaneous determination of each by a host of other factors Davenport seems to be revealing the superficiality in the theory of his predecessors. There is no relation of market price to the real human forces, to man's capacities and desires. That would take a more fundamental analysis—psychology, physiology, soil, climate, minerals, topography, chemistry, engineering, industrial organization, government, social groupings. In a word, the final development of marginist analysis into pecuniary logic in the hands of Davenport is the overthrow of the whole structure of orthodox economics as being either unscientific rationalizations or generalizations that no longer hold.

Davenport, on this interpretation, is not an orthodox economist but a satirist of individualistic capitalism. He is a satirist who satirizes by giving a realistic description of the system he satirizes, a relentless, logical deduction from its premises. He is a satirist by exposition like the pacifists who denounce wars by exhibiting photographs of battlefields. The conclusion from the premise of a purely money economy to the exclusion of all ethical (or legal) valuations is (1) that a successful bootlegger who becomes rich is as great or greater than Edison or Steinmetz, (2) that the manufacturer of burglars' jemmies is as productive as the maker of automobiles, if his pecuniary acquisition is as great, (3) that the banker and the bank robber who make an equal amount of money are social equals in the Utopia of atomic individualism. Thus the logical development of the classical and marginist postulates eventuates into a *reductio ad absurdum*. Eclectic economists on the other

hand have also assumed the price system and the entrepreneur point of view; and they justify them as far as it can be done. But when they reach the point of abuses and inadequacies they switch to social criticism of their own system. But Davenport is relentless in pursuing the logic of the orthodox premises, and his final evaluation in the last two chapters of *The Economics of Enterprise* is entirely hostile. According to Davenport, the chief characteristic of modern industrial society is the fact of immense, iniquitous private incomes which are based on capitalized bounty of nature, capitalized privilege, and capitalized predation. The result of Davenport's realistic description of the competitive order and of his relentless deduction from the premises of that order indicates the need of reform of economic theory. That, according to Davenport, is the field for a new and constructive economics. "It is, then, for someone to construct an economic science adapted not only to the requirements of the facts but to the needs of their amelioration."¹

By way of summary, it appears that marginists, starting out to give a mathematical or universal presentation of the laws of economics, developed gradually into the pecuniary book-keeping analysis of the profit-seeking entrepreneur. It thus furnished a contribution to the psychology of the economic man. In the attempting to make economics an exact science it became attenuated into mere cost accounting. The tendency, then, was toward the development of another variant of the orthodox theory, another justification of things as they are. But there arose among economists trained in the orthodox tradition acute and social-minded expositors, and critics of the system of individualism, so that the final development of marginism was self-destructive.

Still our negative conclusions as regards marginism should not blind us to the fact that the marginal and the pecuniary analyses may have significance and value. The marginal analysis divorced from pecuniary standards and applied to some more

¹ Davenport, *Economics of Enterprise*, p. 528.

scientific human standard, such as calories, vitamins, or other measures developed by chemistry or psychology may be a valuable future approach to the subject of consumption. (In that case marginist economists may deserve the honour of the initial movement in the new development. The pecuniary analysis has also been of great practical help both from the social and the productive point of view.) The evolution of the money economy was necessary for the expansion of exchange and trade. It helped free the serfs and break down feudal privilege. It has also facilitated the development of production. It has simplified and standardized economic analysis, and thus facilitated the rise of large-scale industry. Marshall's distinction between prime and supplementary costs has led to the whole modern theory of the economics of overhead costs and to the more efficient management of large-scale production. Marshall's theory of the representative firm and other constructive distinctions are also the result of pecuniary analysis. It would seem, then, that the up-to-date contribution of marginism, like that of classicism, is mainly in the field of production. The problem of value and distribution, which both classicists and marginists set out to solve, appears to be insoluble under their own assumptions and hypothesis. The conditions under which the classical analysis was valid, although never fully realized, have conformed to the actual conditions less and less with the passage of time. And the marginist solution of exchange value, as was pointed out above, is valid only in the individual, isolated economy, where no exchanges take place. Both of these types of economic theory, then, are now mainly of academic or of historic interest. *A*

CHAPTER IX

THE NEWER CAPITALISM

THE term Newer Capitalism does not apply to any complete, consciously elaborated system of economics. It is concerned with certain recent economic changes in the field of production. The aspects of an economic system that will be developed under this head concern production. There is little attention given to the theory of distribution and consumption, except as these are necessary conditions of the productive process. The material for this chapter is derived partly from academic and partly from non-academic sources. The academic sources are chapters in text-books on economics which deal with large-scale production, the corporate form of industry, and value under conditions of increasing returns. The non-academic sources of this material consists largely of the observations and reported interviews of practical business leaders like Henry Ford, and of written formulations of their views.¹ If anything, emphasis will be placed on the non-academic sources of the material in this chapter.

The journalistic and aphoristic nature of much of this material, while it does not lend itself so well to systematic analysis, yet has the advantage of relative freedom from certain arbitrary premises and postulates, which has limited the effectiveness of much of the older academic theory. The non-academic authors of the theory of the Newer Capitalism have not been helped or hampered by a knowledge of history or economic theory. They are not expressing logical deductions from the conclusions of other social sciences. They do not employ mathematics or statistics. They do not make fine distinctions with regard to the relations of economics to ethics

¹ See Ford and Crowther, *To-day and To-morrow*; also Filene, Edward, "Mass Production and the Tariffs," *Annals of American Academy of Political and Social Science*, January 1929.

or psychology. They do not make elaborate deductions from universally valid economic laws, except the law of supply and demand. The value of this material is due to the fact that it is based on realistic observation and experience; it is the product of first-hand contact with the latest features of the industrial process. If economic theory in general has been a rationalizing or theorizing arising out of the actual processes and changes in industrial life, the material derived from observations of practical industrial leaders may be the stuff out of which is to be constructed the newer economics.

Like all other economic systems or attitudes the Newer Capitalism starts with certain assumptions or the acceptance of certain institutional conditions. The practical thinkers of the day accept private property and contract as a matter of fact, also the inheritance of property. They accept the present legal institutions and legal limitations on industrial initiative. They adopt the entrepreneur, private profit point of view; but not to the extent of pecuniary analysis as that is represented in the logical system of Davenport. Newer Capitalism differs from pecuniary analysis, partly because it adopts the technological as well as the financial point of view, and partly because it accepts the legal limitations upon methods of money-making. It recognizes that not all forms of money-making are legal; and it assumes that productive economic activity is concerned with making goods and making money in accordance with the laws of the land and the recognized principles of business ethics. It takes the entrepreneur, private profit viewpoint in so far as that is compatible with present laws and the standards of customary morality. There is also an emphasis on physical output of goods. The automobile industry, from which many of the newest deductions are made, is the source of good wages, liberal managerial salaries, and large dividends to the owners of common stock. But emphasis is also laid upon the millions of cars and trucks in service, and upon the decreasing number of persons per vehicle. Thus the Newer Capitalism combines both the classical emphasis

on physical output and the pecuniary emphasis of the money economists.

In another respect the newer capitalists are similar to their academic predecessors. They do not take up the question of consumption. Their emphasis is on quantity and exchange values rather than quality or use values. Hence the historic abstraction of the economic man, if he could drop some of his assumptions, and catch up with the trends of the new technology, would find himself at home in the Newer Capitalism; while he would probably be much bewildered if he found himself in the society of anthropologists, historical economists, welfare economists, institutionalists, and collectivists.

Although the newer capitalist agrees with the earlier economists in certain fundamental assumptions, especially as regards the legal system and social institutions, he has dropped a number of the fundamental assumptions of the classicists and the marginists. Among these are free competition and *laissez-faire*. The state is now recognized as something more than the mere police state. It not merely preserves order, but it is a positive industrial agent, carrying on certain creative social activities like health and education, operating certain industries like the post office, and in some cases the railroads, and exerting a greater or less degree of regulatory power over industries that are privately owned and operated. This recognition of the increasing scope of governmental activities is an important distinction between the earlier and the newer capitalism.

Another distinction is change in the form of industrial organization. The development of mass production has been promoted on the whole by the corporate or integrated form of organization in place of the earlier individual proprietorship or partnership. This is due to the advantages in the mobilizing of capital and the diffusion of risks which facilitate the founding of large-scale enterprises.

With the shift of industry from the individual proprietorship and partnership to the corporation, the trust, the merger, the cartel, on the one hand, and the giant government monopoly

on the other (of course, the Ford Motor Company is an exception to this generalization—an individual proprietorship with the characteristics of a large corporation), there has come to be a difference in the time factor. In the period of classical economics it was contended that economic laws, or an automatically self-adjusting system, would bring about social justice and a complete exchange of economic goods and services in the long time, even if there were friction and temporary maladjustments due to unforeseen changes. "The long time" meant the period within which competition would bring about proportional equality in wages and profits in different occupations or enterprises. In the early days of the factory system, with relatively small plants and inexpensive machines, this period of adjustment was relatively short, although doubtless much longer than that of the earlier domestic industry. But under the modern, large-scale capitalism, the machine process, or mass-production industry, where the process is increasingly roundabout and indirect, the time factor, or period of foresight and calculation, or of the adjustment between demand and supply, is correspondingly lengthened. The corporation and the government represent forms of industrial organization more suited to the long trend in modern industry. The more roundabout method of production is accompanied with more rapid technological change, so that an industry may be superseded or become obsolete before it has reached the point of full development or static equilibrium. So industrial foresight and rational initiative tend to be of declining significance relatively to sheer good fortune or luck.

Under these conditions free competition is no longer assumed, or the perfect mobility of capital and labour. The distinction between competitive industries and monopolistic industries has less practical value than it formerly had. Big industry, whether monopolistic or non-monopolistic, has much the same characteristics—a vast capital outlay, the necessity for long-time planning, a vast but uncertain market; so that a new industry, like that of the automobile industry, has characteristics similar to that

of the monopoly; demand exceeds supply for a long period; enlarging operations bring about diminishing unit costs. At the same time the juxtaposition of government monopolies and government-regulated private industries, with regulated rates of return, as in the case of the railroads, with price-fixing or rate-fixing as in the case of all public utilities, with attempted regulation of the price of wheat, with fixed salaries and wages of government employees, there is such a mixture of flexible and rigid elements in the economic system that one can no longer assume conditions under which a price system may bring about adjustments within a short time. In other words, with large plants and high overhead costs, with monopolies and private industries which are indistinguishable from monopolies, competition does not equate price and cost of production except over long periods.

Hence free competition, complete mobility of capital and labour, the police state—these early assumptions of the classical economists—are not the postulates in the analysis made by the newer capitalists. Also, there is no assumption of static conditions. Invention and change have become normal.

Naught may endure but mutability.

The static assumptions by which Ricardo could deduce the law of industrial progress are now relegated to the realm of fiction. There is, then, no necessary conflict between capital and labour. We have now the experience of the President of the United States Steel Corporation demanding as a part of business and social policy that wage-rates shall be maintained during a period of falling commodity prices, and a republican President of the United States insisting upon the same policy. Industrial conditions are frankly accepted as dynamic; and economic principles derived from the Corn Laws controversy are no longer assumed to fit modern industry.

With the passing of the exclusively competitive order and the declining importance of the individual proprietorship, there

has tended to pass away the old atomic individualism that was invented as a justification for the revolt against feudalism and medievalism. The growth of mass production, of specialization of labour and management, the widening of the market into a national or world economy, the long-time movements and dynamic conditions, the greater complexity of the industrial process, and the more rapid tempo of change, have put the economic situation beyond the understanding or control of any one man. There is necessary a delegation of authority and the specialization of management. Capital and administration of industry are now typically represented by different men. The work of planning, of financing, of organizing, and of administering industry has to be delegated and subdivided into a large number of special groups of experimenters, scientists, organizers, and administrators. The principle of specialization, which was formerly applied to labour, becomes extended to capital, management, and government. The old theoretical, atomic individualism is replaced by the modern socialized individualism as an ideal which must be realized in considerable measure if modern industrial society is to exist.

Where this necessary socialization of industry is not realized one sees the dark side of the present picture: the public exploited by monopolistic or large-scale industry; the wage-earners without assured or steady employment or a just and adequate wage; society torn by conflicts over the division of the product of industry; trade predatory and untruthful; government subject to dictation by big business; and racketeering, or organized enterprise outside the pale of the law, holding its own in defiance of the putative representatives of order and public welfare.

These adverse features of modern industrial life, however, are ignored in this study of Newer Capitalism. We are dealing with socialized mass-production industry. Profits, as Davenport has pointed out, may be gained through privilege, predation, and exploitation of the bounties of nature. They can also be gained by the organization of labour and the introduction

of improvements, by innovations which lessen the cost of production.

The chief characteristic of the Newer Capitalism is the recognition that under modern conditions there is a new combination of factors. This appears notably in the change of ratio of the factors in the cost of production. The abandonment of *laissez-faire* and increasing public expenditures have greatly increased the item of taxes in the cost account. Also the use of larger and more expensive machines, the evolution of the machine process, has greatly increased the ratio of capital costs. These capital costs include three items—the interest on investment, the depreciation of plant and machinery, and obsolescence. There is, however, a much lower ratio of labour or wage expense. The increase of taxes, interest, depreciation, and obsolescence represents the increasing importance of overhead costs, so that the Newer Capitalism might be called the economics of overhead costs. The result of these changes is the necessity for the speeding up of industry. There is need of increased production in order to lower the unit cost of overhead, and hence the total unit cost.

These facts are all, of course, familiar to cost accountants in our large-scale manufacturing and transportation industries; but it is not so well known that the change in the relative importance of different factors in production, such as taxes, interest, depreciation, and obsolescence, have changed the whole bent of agriculture, and made it in many cases also an industry of “increasing” rather than of “diminishing” returns. In other words, the law of the proportion of factors receives a new emphasis from a realistic analysis of the extractive industries.

Below are some illustrations of costs and return in agriculture, which, although hypothetical, may be fairly typical.

Let us first take the case of a farmer who in the latter part of the nineteenth century buys one thousand acres of land in the Middle West in a region which because of soil and climate is well suited to raising both wheat and corn. The total price

paid is five thousand dollars. There are three grades of land in the farm: the best grade (A) four hundred acres, which yields twenty bushels of wheat per acre; B grade of three hundred acres, which yields fifteen bushels per acre; and C grade, three hundred acres, which yields ten bushels per acre. The price of wheat is assumed to be one dollar per bushel. The farmer operates his land alone, and cultivates two hundred acres per year of his best land. Under these conditions the cost account would run somewhat as follows:

A. ONE-MAN WHEAT FARM, 200 ACRES CULTIVATED, 1890

Cost—

(1) Rent of farm, or interest at 6 per cent on investment of \$5,000	\$300
(2) Rent of machinery and stock or interest on \$2,000, value of same	120
(3) Depreciation of machinery	200
(4) Taxes at 2 per cent of value	100
(5) Seed	300
(6) Miscellaneous	100

Total \$1,120

Revenue—

200 acres at 20 bushels per acre equals	
4,000 bushels equals	\$4,000
Expenses	1,120

Labour income \$2,780

B. ONE-MAN WHEAT FARM OF 1,000 ACRES, 1928 MODEL

Cost—

(1) Rent of farm, or interest at 6 per cent on investment of \$50,000	\$3,000
(2) Rent of machinery and equipment or interest on \$10,000, value of same ¹ ..	600
(3) Depreciation of machinery	2,500
(4) Taxes at 2 per cent of value	1,000
(5) Seed	1,500
(6) Miscellaneous	200

Total \$8,800

¹ Includes combine, tractor, truck, and other modern equipment.

Revenue—

400 acres at 20 bushels equals	..	..	8,000 bushels
300 acres at 15 bushels equals	..	..	4,500 bushels
300 acres at 10 bushels equals	..	..	3,000 bushels
			15,500 bushels or dollars
Expenses	..	..	8,800
Labour income	..	..	\$6,700

Under the changed conditions the capital investment in the land is now ten times as great, the investment in machinery is five times as great, the depreciation on machinery is twelve times as great, the expense for seed five times as great; but the application of labour is the same. From the point of view of return the money income per man has increased nearly two and one-half times, the grain output per man has increased nearly four times, the public revenue from the farm has increased to ten times, although the resort to poorer land has caused the average crop per acre to decline from twenty to fifteen and one-half bushels. The return neither in money (two and one-half times) nor in grain (four times) is commensurate with the increase in money investment in land (ten times) or quantity of land (five times) or money investment in machinery (five times). From the point of view of the Ricardian analysis this would be an illustration of diminishing returns; but from the point of view of concrete, realistic economics it represents an advantageous change for the individual farm operator and the general public as consumers of wheat and beneficiaries from governmental expenditures.

Under these hypothetical conditions of 1890 and 1928 wheat-farming, then, would appear to be an industry of "increasing returns" if reference is made to the labour income of the operator. The more accurate statement is that there is now a different proportion of factors in the industry. Increased population has brought about a great rise in land values. Increased public expenditures, which necessitates large public income, has caused the taxes to rise at least as fast as the value

of the land. But the chief change of forty years is the fact that new and more expensive farm machines have enabled the farmer to handle four or five times as much land as formerly, only with a much greater interest and depreciation account.

Cost per bushel exclusive of return to labour, or ratio of overhead to market price:

A. 28 cents or per cent.

B. 57 cents or per cent.

C. Now suppose that our farmer were a routine-minded person who was not alert to the fact that a man with new machinery could operate more land, or suppose he lacked capital or credit to invest in the more expensive machines, so that in spite of high land values and taxes he continues to work only two hundred acres with the same obsolescent equipment and methods. His account, then, would run somewhat as follows:

Cost—

(1) Rent of farm, or interest at 6 per cent on investment of \$50,000	\$3,000
(2) Rent of machinery and stock or interest on \$2,000, value of same	120
(3) Depreciation of machinery	200
(4) Taxes at 2 per cent of value	1,000
(5) Seed	300
(6) Miscellaneous	100
Total	\$4,720

Revenue—

200 acres at 20 bushels equals 4,000 bushels equals ..	4,000
Expenses	4,720
Labour income	— \$720

Case C would be a difficult problem for the Ricardian. Money expenses have increased (from Case A) about four times, and yet the grain output is the same. The labour income in money has declined from 2,780 dollars to minus 720 dollars. Here is a case of diminishing return because, under changed general conditions, the farmer did not resort to the poorer B and C

grade land. The more accurate formulation of this case is that it represents a malproportion of factors, too much relative investment in land, or too little relative investment in machinery, or the farmer himself representing inadequate managerial and mechanical ability in proportion to the other factors in the situation.

These, of course, are illustrations of the principles of the Newer Capitalism or of mass production as applied to the raising of wheat.

Now take another case where over-production of wheat or unpayable war debts, or the tariff, or all these and other factors have reduced the price of wheat to fifty cents a bushel.

D. ONE-MAN WHEAT FARM OF 1,000 ACRES, 1931 MODEL

Cost—

(1) Rent of farm, or interest at 6 per cent on investment of \$50,000	\$3,000
(2) Rent of machinery and equipment or interest on \$10,000, value of same	600
(3) Depreciation of machinery	2,500
(4) Taxes at 2 per cent of value	1,000
(5) Seed	750
(6) Miscellaneous	200
Total	\$8,050

Revenue—

15,500 bushels at 50 cents	7,750
Expenses	8,050

Labour income — \$300

Here again the enterprise has become unprofitable, although the farmer has maintained the same excellent proportion of factors that brought the satisfactory results in Case B. Conditions external to this enterprise, to this farm and farmer, have again altered the optimum proportion of factors in the industry. Increased production due to wide adoption of modern power-driven machines, the tariff, the war debts, the return of Russia to the export of wheat, the industrial depression and unemployment, inequitable taxation—these are dynamic forces

that make necessary another combination. Perhaps it will be necessary to have a continuous and expert audit of the conditions of wheat-farming and other industries, or, in other words, central planning and control, if able and industrious individual workers can now get favourable results only in case of fortuitous conjunctures which are beyond their knowledge or control.

Now let us consider another possible modification of Case B. The time, it is supposed, is around 1928, before the slump in the price of wheat. Conditions are the same as in Case B, except that the value of land has risen to one hundred dollars an acre, and our farmer is assumed to have four grown sons who are all capable farmers and interested in agriculture. The cost account would run somewhat as follows:

E. WHEAT FARM OF 1,000 ACRES, 1928 MODEL

Cost—

(1) Rent of farm, or interest at 6 per cent on investment of \$100,000	\$6,000
(2) Rent of machinery and equipment or interest on \$10,000, value of same	600
(3) Depreciation of machinery	2,500
(4) Taxes at 2 per cent of value	2,000
(5) Seed	1,500
(6) Miscellaneous	200
Total	\$12,800

Revenue—

15,500 bushels at \$1 per bushel	15,500
Expenses	12,800
Labour income	2,700
Average per man income	540

Under these conditions the question arises whether it would not be desirable to shift to another and more intensive mode of using the land, such as corn-growing. It is assumed that the A grade land will produce sixty bushels of corn per acre; the B grade land, forty-five bushels; and the C grade land, thirty bushels. If the farm is devoted to corn, it is assumed that it would fully employ the labour of the five men, each

with an equipment of stock and machinery of two thousand dollars. The new cost account would run somewhat as follows:

F. FIVE-MAN CORN FARM OF 1,000 ACRES, 1928 MODEL

Cost—

(1) Rent of farm or interest at 6 per cent on investment of \$100,000	\$6,000
(2) Rent of machinery and equipment or interest on \$10,000, value of same	600
(3) Depreciation of machinery*	1,000
(4) Taxes at 2 per cent of value	2,000
(5) Seed	130
(6) Miscellaneous	200
Total	\$9,930

Revenue—

400 acres at 60 bushels	24,000 bushels
300 acres at 45 bushels	13,500 bushels
300 acres at 30 bushels	9,000 bushels
	<hr/>
	46,500 bushels
	\$
46,500 bushels at 75 cents [*]	34,875
Expenses	9,930
	<hr/>
Labour income	\$24,945
Average labour income	\$4,989

Below are comparisons of Cases E and F:

	E	F
Total labour income ..	\$2,700	\$24,945
Labour income per man..	\$540	\$4,989
Total output in grain ..	15,500 bushels wheat	46,500 bushels corn
Output in grain per man..	15,500 bushels wheat	9,300 bushels corn

* Less rate of depreciation on simpler machinery, and draught animals reproduce themselves.

In Case B there was a favourable situation for wheat-raising. In Case F there is a favourable situation for corn-growing. What are the comparisons between a condition favourable to wheat and one favourable to corn? The results are shown in the comparison between Case B and Case F. It is to be noted

that on the appreciation of the land value from fifty thousand dollars to one hundred thousand dollars the owner of the farm receives an additional investment or unearned income from appreciation of land values of three thousand dollars.

Under the conditions of change to a more intensive mode of cultivation, B to F, the capital investment in the land is now twice as great. The amount of the land is the same. The investment in machinery is the same. The depreciation on machinery is only 40 per cent as much. The taxes are twice as high. The labour applied is five times as great. Total money income is nearly four times as great. Money income per man is less than three-fourths as much. Total grain output is three times as great. Output of grain per man is 60 per cent as great. If money investment in land, quantity of land, money investment in capital, taxes, and labour units were the only factors to be considered, and were represented as approximately of equal weight, the comparison would run somewhat as follows:

					Case B	Case F
Money investment in land	..	..	..	..	x	$2x$
Quantity of land	..	..	..	..	x	x
Money investment in capital	..	..	..	..	x	x
Taxes	..	..	..	..	x	$2x$
Labour	..	..	..	..	x	$5x$
					<hr/>	<hr/>
Total	..	..	..	..	$5x$	$11x$

According to this new method of computation by comparison of productive factors, there are five productive factors in Case B and eleven in Case F. The new cost account would, then, be as follows:

					Case B
Productive factors	..	..	..	..	5
Money incomes	..	..	..	..	\$6,700
Grain output	..	..	..	..	15,500 bushels wheat
Money income per productive factor	..	..	..	..	\$1,340
Grain output per productive factor	..	..	..	..	3,100 bushels wheat

Case F

Productive factors	..	..	..	..	II
Money income	..	..	..	..	\$24,945
Grain output	..	..	..	..	46,500 bushels corn
Money income per productive factor	..	..	..	..	2,267 plus
Grain output per productive factor	..	..	..	..	4,227 bushels corn

According to this inexact method of analysis, the approach from the point of view of the new economic theory would characterize this as a case of "increasing returns," or as a case of a better proportioning of factors according to all the potentialities of the situation.

CASE G

While under the price situation of one dollar wheat to seventy-five cents corn, it is probable that under the given situation a change from wheat to corn culture would represent a condition of "increasing" returns, according to the individual pecuniary analysis. There would be no question of this under present conditions (1931), when the price of wheat is fifty cents and of corn sixty cents. Here the new total complex would be much more favourable to corn culture; and the shift from wheat to corn would represent, as long as the new price ratio obtained, a much better proportioned enterprise and the evidence of a more efficient industrial management.

There are several other possibilities, however, involved in the shift from wheat- to corn-growing. A fundamental one is the institution, or the prevailing social habits that govern the distribution of the farm income; and the question of the current wages of agricultural labour. In Case F the total labour incomes was estimated at 24,945 dollars, which was earned by five men. The labour income per man was represented as one-fifth of this. The actual distribution of the farm income depends upon the nature of the agreement between the father and his four sons, whether the relationship is that of a partnership or of employer and employees. If the old man were well endowed with philoprogenitiveness, so that he would not differentiate

between his own economic interest and that of his sons, the family enterprise would represent a miniature communism, and the labour income would be equally divided. However, if the owner of the farm were an atomic individualist, and employed his sons at the market rate of wages, the distribution of the farm income would depend to a large extent on the current wage. If that were one thousand dollars per year, the account would run somewhat as follows:

H. FIVE-MAN CORN FARM, 1,000 ACRES, 1928 MODEL

<i>Cost—</i>						\$
Material and overhead cost	..	..	..	..	..	9,930
Labour cost	..	..	..	..	..	4,000
Total	..	..	..	..	..	\$13,930
<i>Revenue—</i>						
Revenue	..	..	..	..	..	34,875
Expenses	..	..	..	..	..	13,930
Wages of management, rent, and profit	..	..	..	..	..	\$20,945
Investment income, or rent	..	..	..	..	..	6,000

According to this view, that of the individualist, entrepreneur, pecuniary, marginist analysis, there is a clear case of increasing profits—from 6,700 to 20,945 dollars. There is also a case of increasing return for economic factor from 1,940 dollars per factor in Case B to 2,450 dollars per factor in Case H. From the social point of view the conclusion is not the same. Formerly an individual farmer made 9,700 dollars. Now there are five economic subjects, one has a capital and labour income of 20,945 dollars, and four others are labourers with wages of 1,000 dollars. There has been great economic improvement according to the views of "the individual" who, of course, is the recipient of the rent and profits.

But to return to theorizing; the Newer Capitalism assumes not merely a change in the ratio of the different factors in the cost of production, but a general change in all the major economic factors. In the classical economics it was pointed out that there was an assumption of capital accumulation as a

lagging or limiting factor in the economic process, invention of new and larger machines, and the markets for the products of the machine industry being assumed to expand more rapidly than the investment loan funds that were secured by individual abstinence from consumption. Although invention has proceeded for much of the past century at an accelerated rate, it is probable that the accumulation of loan funds has proceeded more rapidly. In addition to the personal savings of the wealthy and middle classes, there have been added two other conditions which greatly facilitated the expansion of loanable funds.¹ One of these is corporate surpluses. In the case of the great corporations part of the profits, which are earned through the organization of labour and the application of science and engineering to production, are maintained as a separate fund and not distributed to stockholders. This fund furnishes the means for the automatic enlargement of the enterprise without involving savers' cost or the sacrifice of consumption in order to provide the purchasing power; since the profits of the corporation in many cases are so great that a generous return on the investment is made from the earnings in excess of the amount placed in the corporate surplus.

Also new sources of capital accumulation have developed during the evolution of organized banking. The Clearing House, the National Banking System, and finally the Federal Reserve System have greatly expanded potential bank credit loan funds. The expansion of these funds was not limited by savers' sacrifice of consumption, except in the case of the saving of the original bank capital or the required cash reserves. It has been estimated that under the Federal Reserve System potential loan funds are from twenty-five to thirty times the amount of money in the reserve system. Under these conditions the limitations of loans are not the accumulation of capital but the profitable use of loans. The profitable use of loans depends upon the invention of machines or the discovery of more

¹ Wolfe, A. B., "Savers' Surplus and the Interest Rate," *Quarterly Journal of Economics*, 35, 1920-21, pp. 1-35.

efficient processes which will justify the scrapping of the old plant and machinery and the investment in the newer and more efficient capital. Hence the classical assumption has been reversed. The accumulation of capital is no longer a drag upon invention, but invention, however speedy, lags behind the potential loan funds of the new credit economy.

But not only has credit increased faster than inventions, but production as a whole has expanded more rapidly than the market; or, in other words, the system of production has turned out more goods than the present system of distribution can put into the hands of the ultimate consumers. The meaning of this is that the supply of finished commodities has become so great in relation to the money that is offered for them that they have to be sold in many cases for less than or no more than the expenses of production in order to clear the market. But how can production outstrip the market if, according to Say, J. S. Mill, Cairnes, and others, production itself creates purchasing power, supply creates demand, goods are produced to be exchanged? The answer to this is found in our money and credit economy. Present demand is the amount of money at present offered for consumers' goods. This money may be derived from sales of goods in the past or from credit based on expected sales of goods in the future. If invention is rapid and the interest rate high, much of the money derived from sales of goods or services will be invested and will not get into the present equation of demand for consumer's goods. If production, in the sense of a greater supply of consumers' goods over money offers at a given price level, increases in this sense, a relief can be secured through foreign trade. Thus an old country whose manufacture has reached the saturation-point on the home market may reduce the supply on the home market and raise the price by shipping goods to new countries which are on an agricultural basis. The purchasing power to buy these goods abroad may be secured by credit, by hypothecating the natural resources of the new country. Credit derived from discounting a future economic development may thus

create a new market, and thus enable demand temporarily to catch up to supply. This mode of relief, however, is limited in time, since the growth of population in the new country and the diminishing *per capita* supply of land gradually creates a condition in which manufacturing becomes profitable in the new countries. The result is the over-expansion of world manufacture, a struggle for world markets, the recrudescence of nationalism and neo-mercantilism, a world war, an unparalleled loss of human life, the destruction of capital accumulated through a half-century of labour and invention, and the *reductio ad absurdum* of the nationalistic, industrial economy which aims at balancing demand and supply through an ever-expanding "favourable" balance of trade.

In brief, production has outstripped the market. Mass production requires mass consumption. Hence national over-production needs a foreign market. The conquest of the foreign market follows one of two policies, the mercantilistic or that of the classical political economy. The first of these aims to retain the home market by means of the tariff and advance the foreign market through the extension of credit. By this policy no world economy can be achieved, only the divisive, hostile, nationalistic economies. The World War signalled the breakdown of such a policy.

The other policy, that of classical English economics, takes the international, cosmopolitan attitude that may make for a world economy. There is freedom of trade and exchange throughout the world. Goods are produced in regions or areas which have a natural advantage in production, and are exchanged for other goods produced in other areas of natural advantage. The result is wide areas of economic interdependence, and hence the possibility of developing mass production. This latter approach, one of the most recent phases of the Newer Capitalism, represents a return to the doctrine of Adam Smith in the fields of production economics.¹

— ¹ Cf. Filene, Edward, "Mass Production and the Tariff," *Annals of American Academy*, January 1929.

Another source of market expansion to balance the increase of production is the development of the home market. This topic will be treated from the point of view of new inventions, wages, and public expenditures.

While on the whole it seems that inventions have not increased as fast as available loan funds, yet the history of inventions shows fluctuations. The rate of business activity seems to depend largely on the quantity or importance of recent inventions. Under these conditions the older industries tend to be depressed. As Veblen put it,¹ the normal state of industry is a period of depression. Thus the industries that used to be regarded as staple are depressed through relative over-production—agriculture, coal, textiles, shipping, merchandising, iron and steel. Thus in the recent history of industry there have been cycles of invention, expansion, the attainment of the saturation-point, and depression. Relief from this situation is derived from new and larger inventions, which offer an outlet for the investment of capital gained in the earlier industrial cycles. Thus the era of textiles and iron and steel and shipping was followed by the era of great railway expansion. The building trades have followed a fluctuating career. The present most prosperous industries are those connected with new technical developments—automobiles, radios, aeroplanes, electricity, and super-power. In order that there may be industrial prosperity, according to the purpose of the Newer Capitalism, there must be an expansion of industrial cycles like increasing spirals. If the sailboat is succeeded by the steamboat, if the stage coach is succeeded by the railroad, if the bicycle is succeeded by the automobile, if the small forge gives way to the giant steel plant, there is the Industrial Revolution which makes possible the ever-expanding operations assumed in the Newer Capitalism. Apparently a culminating or temporarily culminating stage in this process is illustrated in the development of the automobile industry. Automobile manufacture, with its subsidiary industries—oil, mining, tires, road-building,

¹ Veblen, J., *The Theory of Business Enterprise*, chapter vii.

servicing, and repairing—has within recent years become the major large-scale industry. The next step in the progressive evolution of industry after the automobile many thought would be the aeroplane; and great corporations were formed which it was hoped would repeat on a grander scale the achievements of the Ford Company and the General Motors Company. But up to date the expectations have been disappointing. People have not taken to the aeroplane the way they took to the auto. This is probably due to the absence so far of inventions which would make the aeroplane as safe and easy to operate as the automobile. This again is an illustration of our thesis of the relative backwardness of invention in comparison with capital accumulation. Immense profits accumulated in the automobile expansion are awaiting an outlet in another industry; but so far the fortunes of invention have not released this vast reserve supply of economic power.

Another central feature in the theory of the Newer Capitalism is the emphasis on the importance of high wages. Production has now overtaken the market. In order that industrial activity may be maintained there is need for increasing consumers' purchasing power. Hence the value of high wages in order to keep up production and its profits. This represents a reversal from the condition assumed in the classical economics in which there was supposed to be a conflict of interest between the employer and the employee. Under certain conditions this assumption is probably true. If labour is the chief factor in the expense of production, and the commodity mainly a luxury good, like high-grade textiles which are made to be sold in the foreign market; that is, if the wage-earners themselves represent an insignificant market for their own product, low wages may promote high profits in the industry. But in modern mass-production industry, like that in the United States, machine-made products are sold to the mass of the people, and the wages of labour in the mass-production industries represent a large part of the purchasing power for the products of these same industries. One of the chief characteristics of mass-

production industry is the predominance of capital expense over labour expense. Labour is no longer the major factor in the cost of most manufacturing. A member of the Department of Commerce estimates that at present labour wages constitute only 16.2 per cent of the total factory cost. At the same time the wages of the labouring classes in the United States represent a considerable fraction of the national income. It has been estimated that in 1918 the income from all sources of salary- and wage-earners was 58.7 per cent of the total income of the entire population of the United States.¹ If, then, the wages earned by labour in large industries represent about half of the market demand for the products of industry, but at the same time represent less than one-half of the expenses of production in these industries, an increase of wages spent for the products of mass-production industries, which would allow an expansion of output and a lower unit cost because of the great reduction of overhead expense, would benefit all concerned. It would benefit the owners of the enterprise because the expansion of the home market would more than compensate for the increased labour expense. And it would obviate the great losses due to industrial depressions. And the increase in wages would be a net gain to the wage-earning class, a gain to the class that is most numerous and most needy, a class for whom an additional unit of economic goods has the greatest utility.

To illustrate this principle of mass-production industries, and to show the social and business advantages of high wages, let us take a hypothetical case of financing in the automobile industry. Suppose that with an output of two hundred thousand cars a year of the class of Fords, the cost of production per car is six hundred dollars, and the sales price is set at six hundred and five dollars. Let us start with the paradox that it is possible under certain circumstances for an automobile manufacturer to sell for less than the cost of production and yet grow rich.

¹ *Income in the United States*, National Bureau of Economic Research, 1, p. 107.

The total net profit is two hundred thousand times five, or one million dollars, and the value of the business, or one million dollars, capitalized, say, at 10 per cent, would be ten million dollars. Suppose that the overhead cost per car is three hundred dollars. Then assume that the price per car is reduced to five hundred and forty-five dollars, or sixty dollars less than the current cost of production, and that wages, not merely in the Ford plant, but general wages, are raised 30 per cent. Then let us assume that because of the elasticity in the demand for motor-cars, and the fact that they are purchased largely by wage-earners, the reduction of price will result in a doubling of sales. The financial result will then be as follows:

			<i>Original Finance</i>	<i>Present Finance</i>
Fixed cost per car ..	..		\$300	\$150
Prime cost ..	..	..	300	390*
			\$600	\$540
Sales price ..	..	..	605	545
Profit per car ..	..	..	\$5	\$5
Number of cars sold ..	..	200,000		400,000
Total profit ..	..	\$1,000,000		\$2,000,000
Value of enterprise ..	..	\$10,000,000		\$20,000,000

* (\$300 plus 30 per cent.)

If this case is representative, it would seem that in so far as industry becomes large scale, is characterized by large overhead costs, and produces articles for sale to the great mass of the people, there is no conflict of interest between employer and employee, between capitalist and workman in their aspirations to increase profits and enjoy more economic goods. It is a far cry from the doctrines or the implications of the doctrines of Ricardo that the interests of the capitalist and the labourer were antagonistic, and that the way to increase profits is to reduce wages. Hence the importance of maintaining wages as a source of demand of the products of mass-production industry and the policy of opposing wage cuts by industrial leaders and

by President Hoover. This philosophy of the business depression as due to deficiency to consumers' purchasing power has been developed in the writings of Foster and Catchings. It received an earlier and aphoristic statement in the remark of Henry Ford that the way to obviate a threatened business depression is to raise wages and lower prices. This theory of high wages as a basis of prosperity, of course, assumes high general wages. If the industrial employer or the employers in one industry should raise wages, and other employers or employers in another industry should not raise them, or if some employers should maintain wages while others lowered them, the employers who followed this policy of high wages might find the effect disastrous to themselves; for the high wages might simply mean a greater purchasing power or greater demand for the products of industry in which the wages were lower, and increased demand for their own products might not compensate for the increased wage expense. This policy of high wages is thus inconsistent with individualism. A high-wage policy to be successful must be a universal high-wage policy. It presupposes industrial uniformity, which would seem to imply a still further integration of industry or some form of central planning and control.

A third method of equating production and consumption in the new economy of mass production is through an expansion of governmental expenditures—public buildings, schools, parks, playgrounds, libraries, public roads; these represent fields for investment of money and take the place of great new industrial inventions. Labour-saving inventions displace labour and cause technological unemployment. Men displaced by the machines get jobs making bigger and better machines, if the spiral of mechanical invention keeps expanding. But the saturation of the automobile industry does not synchronize with the rise of the great aeroplane industry. The development of super-power takes up some of the slack, but is not sufficient to maintain an equal rate of production. The development of radios and electrical apparatus does not give the employment furnished

by the automobile. The automobile costs perhaps on the average one thousand dollars, and has to be replaced in four or five years. The radio is less expensive and lasts longer. The family electric refrigerator costs scarcely more than one-fourth as much as the family car, and will probably last five times as long. The result of this present stage in the evolution of inventions is the business depression. And it is repeatedly urged that the government undertake public works to furnish employment to men displaced by the machines and not re-employed in the making of newer and better machines. To the same end there are recommended increased public expenditures for education and scientific research, since these bring about increased immediate general purchasing power without increasing the supply of capital goods on the market. Another advantage of increased public expenditures is that it increases wages and salaries or the purchasing power in the hands of the class of people who habitually spend most of their incomes, and it does not increase profits, which contributes largely to swell investment funds; because the government is a non-profit-making enterprise. Governmental expenditure, then, is one remedy for over-investment, the over-accumulation of capital, and the decline of the rate of mechanical inventions.

A more cynical proposal along the same line is for periodic wars, in order to destroy the surplus created by mass production and thus create the conditions for another era of industrial activity. The World War is said to have destroyed capital to the value of 350,000 million dollars, or roughly equivalent to the value of all the physical property in the United States. The war depleted the capital in railways. It brought about accumulated shortage in buildings. It checked the rate of production in the automobile industry. It made possible the great post-war prosperity in the United States arising from the feverish activity of the building trades, an activity which was quickened by the final expansion of the automobile industry. When production again was expanding beyond the consumer's purchasing power, a temporary stimulus to demand was created by the

extension of instalment credit. When discounted future demand was exhausted and new inventions failed to arrive, when a part of the earnings of the German people go to cancel war obligations rather than to enter the world market for goods, and when exchange is hampered by tariffs, the present depression became inevitable. The only mode of escape is through the expansion of government expenditures. And at this point we face the dilemma of the Newer Capitalism. In order to carry out increased expenditures the government has to secure increased revenue through taxation. The general property tax has already encroached upon the purchasing power of the great mass of the people. There is no resort but a tax on profits through the form of an increased income tax. And this income tax is repugnant to the ideals and purposes of the Newer Capitalists.

What would be the probable effect if the Federal Government should pay out 5,000 million dollars or more in wages and salaries to workers on public roads, buildings, waterways, power sites, flood control, afforestation, slum clearance, scientific research, and construction of recreational centres? The immediate effect would be an increase in purchasing power on the part of many who are now unemployed or are working part-time. There would be increased purchasing of goods in the retail market. The retail markets would send in increased orders to the primary markets. An increased demand from the primary markets would be reflected in a great increase in industrial production. The major industries would soon be operating at a much higher percentage of capacity. Greater profits would result, or decreased losses in comparison with the present inactivity. These increased profits would be the sources of the increased income taxes, which would finance the increased governmental expenditure. At this point there is need of quantitative analysis in order to determine whether the profit-taking classes would gain more from increased profits than they lost from increased taxes, or the reverse. It is highly probable, however, that the great relief to unemployment would

vastly promote the welfare of the country as a whole. Economists have maintained that private profits are normally the product of dynamic conditions. If inventions slacken, if dynamic conditions recede, it is inevitable under the classical assumptions of free competition and price adjustment in which all goods clear through the market that profits should decline in proportion to salaries and wages. In the hypothetical stationary state of Ricardo and J. B. Clark profits would tend to disappear, and the national income would be distributed in the form of wages and interest. Under present conditions the insistence on high profits, or the refusal to operate industry except under conditions of "normal" profits, is inconsistent with public welfare or the normal proportion of factors in the present economic complex. It is what in the words of Veblen might be termed "capitalistic sabotage." This, then, is the dilemma of the Newer Capitalism. It cannot maintain industrial activity without raising wages relative to profits, or without giving up profits in large part or entirely in the form of increased taxes unless the rate of inventions increases. If it does not do this the result will be continued or recurring depressions, which is an unanswerable argument against any economic institution.) The resort to war as a relief is the suggestion of a humorous cynic or a gesture of reactionary despair. In case a new and greater cycle of invention does not arise to rehabilitate the system of individual capitalism, it would seem that in order to balance production and consumption through increased wages or increased expenditures there should evolve a further integration and a higher socialization of industry.

This same argument of the Newer Capitalists might be formulated in a slightly different way. Mass production has increased the output of industry per worker. But real wages over a period of thirty years have not increased as fast as industrial production. The result is an increased surplus of goods. If these goods can be sold abroad, the result will be an increased profit to the owners. But mass production is rising abroad. The best remedy is to raise wages so that the

workers can buy back most of the products of industry. The surplus should be exported in exchange for the products of industries in which other countries have a comparative advantage. Thus two of the chief production principles of the modern great industry are high wages and free trade. The refusal in general of modern industrial society to follow the advice of Mr. Ford and Mr. Filene has brought about the great depression. Super-profits were not spread out into higher wages but accumulated in the accounts of multi-millionaires or in the surplus of corporations. Additions to the plants of the great corporations were financed out of corporate surplus until the industry was overbuilt. The surplus loanable funds were then placed through the medium of banks and investment houses in all kinds of enterprises that promised a profit. In this process capital plant became top-heavy in relation to general purchasing power based on wages, salaries, and agricultural income. This surplus, instead of being diffused as higher wages, then sought profits in the stock market. The competition of buyers forced the price of stocks far above the value of the current earnings capitalized. Eventually this was discovered, and the effort to liquidate brought on the collapse of the market. At about the same time part of the surplus earnings derived from large profits sought the field of foreign bonds, and financed the rapid economic rehabilitation of Germany. This was all very well until the time when the German borrowers were supposed to pay. Then it was seen that the scope of the war and private debts and the tariffs make repayment impossible. The earnings that might have been distributed as wages are finally lost as depreciated stocks, unpayable debts, and idle overhead. The capitalists are possibly poorer than they would have been if they had adopted a more generous policy. And probably one-fourth or one-fifth of the wage-earning class is suffering dire privations. ✓

J. S. Mill made an interesting exposition of the functions of capital and capital accumulation in an age when loanable funds were not so abundant and when great inventions were arising

to utilize all and more than all of the surplus economic power.¹ Industry, he held, is limited by capital. If the rich and the well-to-do are frugal, and do not consume the major part of their incomes, but turn them over to the investment houses, employers will be able to secure the food and appliances to equip labourers for production. There will result an increase of industrial production of food, clothing, and fuel. To follow the argument of Mill, this increase might eventuate into one or partly both of two possible consequences—an increase in the number of labourers, as in the theory of Malthus; or in a rise in the general standard of living of the masses, a rise of real wages. Mill could not imagine a surplus of goods, such as we have to-day, that would not be distributed to somebody, so that production could go on. Of course, this was because of his assumption of free competition, the mobility of capital and labour, and the “long run” in economic analysis sufficiently short to bring it within the purview and calculation of the intelligent entrepreneur. The accumulation of capital or investment funds faster than the growth of population he and the other classical economists assumed would of course result in higher wages. Surplus would flow away to the market in the form of consumers’ goods, and the plants would be called upon for fresh production.

But just this desirable consummation was not reached in the post-World War period. Whether it is due to partial monopoly and the breakdown of competition in wage-rates due to the development of customary wages, or the ability of employers to dictate rates of distributive shares, or to the “long run” in modern industry which makes calculation difficult, it is hard to say. At any rate, accumulation of capital faster than population growth did not automatically condition higher wages as it would in the free, self-adjusting system of Mill. And high wages were not established as a business policy. Instead, there were customary wages, larger investments, the stock market boom, foreign investments, “over-production,” the collapse of

¹ Mill, J. S., *Principles of Political Economy*, book i, chapters iv and v.

the stock market, the defaulting of people abroad on interest and principal of war and private debts, the shut-down of industry, the loss of the savings of the rich, and the increased distress of the poor. Should it be repeated that this may be retribution for not following the advice of Ford, Filene, Foster, and Catchings, and others of their school of economic philosophy? As it is, there seems to be an institutional fixation in the distribution of money income of such a sort that the money distributed will not enable the people as a whole to buy all the goods produced, so that vast quantities of goods remain unsold at a time when great numbers are on the verge of starvation and destitution. The system of competition and automatic self-adjustment seems to have been quite largely superseded by a system which has so many elements of rigidity that production and consumption cannot be equated. The remedy, it would seem, is some form of more proportionate institutional arrangement.

So far the discussion of theory in this chapter has developed mainly from opinions advanced by practical business men. A more technical approach to the same subject may be made from the point of view of certain chapters in orthodox texts on economics, such as those dealing with large-scale production and value under conditions of increasing returns. Most classical theory was based on the assumption of constant or diminishing returns, and of a market price which fluctuates around the cost of production, which is a single point of equilibrium between the demand and the supply curves. Modern economic theory, however, makes distinctions in the nature of the demand or direction of the demand curve, and the nature of the supply or direction of the supply curve. Where the demand is fairly inelastic, and production proceeds at constant or increasing cost, there is a definite point in market price, the equilibrium-point beyond which it is uneconomic for production to pass. But in cases where the demand is elastic, and enlarged production makes possible a decline in unit cost, the nature of the market or economic equilibrium may be altered. Under

competitive conditions the producer is likely to think that the first point of equilibrium between demand and supply represents the natural market price, which he can undercut only at risk of bankruptcy. This operation of the law of supply and demand, as Marshall has pointed out,¹ does not always produce the maximum social satisfaction because it might be determined by experiment that there are other equilibrium-points at lower costs and prices. If that were so, and production were carried on to these further points of equilibrium, the public would gain greater satisfaction through an increase of consumers' surplus. And the fall in price which was due to improvements would benefit consumers without injuring producers, for the net profit of producers might be as great or greater at the lower unit cost. In this way Marshall places a limit to the doctrine of the so-called "Maximum Satisfaction"; i.e. to "the doctrine that the free pursuit by each individual of his own immediate interest will lead producers to turn their capital and labour, and consumers to turn their expenditures into such courses as are most conducive to the general interest."² This admission of Marshall, which was an exception to his system of free enterprise, is a universal characteristic of mass-production industry.) These are the characteristics under the Newer Capitalism, applying to most manufacture, to transportation, probably to merchandising, to mining in so far as it is highly mechanized, and increasingly to agriculture, as it assumes the characteristics described above as applying to dairying and wheat- and corn-growing.

Fig. 1 is a reproduction of Professor Taussig's exposition of value under conditions of increasing returns.³ ✓

This figure shows that there may be two points of equilibrium. The demand and supply curves have the same inclination, and may intersect at more than one point. The points A' and C' are points of stable equilibrium, because after them the demand

¹ Marshall, *Principles*, book v.

² *Ibid.*, pp. 470-3.

³ Taussig, F. W., *Principles of Economics*, Third Edition revised, i, p. 192.

curve is below the supply curve. Hence the price might settle at either A' or C' . Under free competitive conditions the price would tend to settle at A' , because producers would in most cases not venture to sell for less than the present cost of production in the hope that costs would eventually fall to the

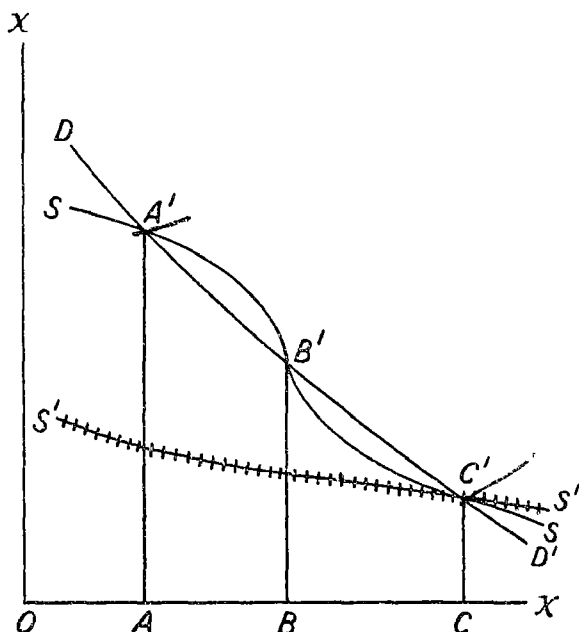


FIG. 1

lower determined price. Of course, Henry Ford is the classical exception to this lack of venturesomeness of producers in the quest of greater consumers' surplus. Marshall makes this condition an argument for government interference or public management, since the public economy can be more venturesome in the fields of price reduction since they are insured against bankruptcy in case of specific enterprises by their power of taxation.¹ Taussig points out that this condition of more than one point of normal equilibrium is found when great changes take place in the arts, and when a new commodity

¹ Cf. p. 315.

is brought into use. In the words of Taussig, "The cheapening of goods which results from improvements usually stimulates demand in considerable degree, causes the total output to be larger, and so brings into operation external economies as well as additional internal economies. Improvements have commonly been in the direction of larger plant and more expensive machinery, greater division of labour, production on a larger scale. Not infrequently the arts have advanced so fast as to cause an abrupt diminution of cost, leave the equilibrium of

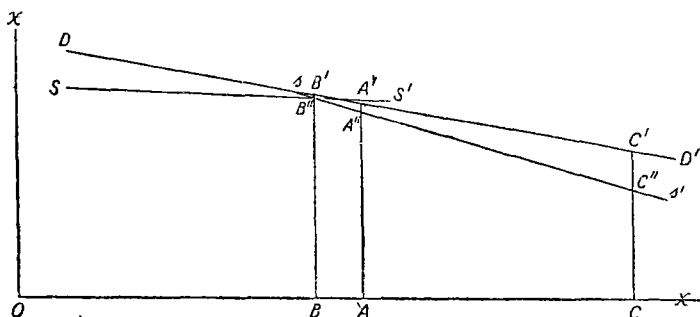


FIG. 2

supply and demand unsettled for years, and afford at least the possibility of more than one point of equilibrium."¹)

Fig. 2 is a graphic representation of the possible advantage to both producer and consumer of great cost-reducing inventions. DD' represents the demand curve for the commodity in question. SS' represents the supply curve. Under these conditions OA would represent the normal output, because beyond the point A' the market price would be less than the cost of production. But before this stage is reached a new invention changes the direction of the supply curve to ss' . Now beyond the point B' the supply curve falls more rapidly than the demand curve, so that although the price is steadily lowered, an increased profit per unit is made on a larger number of units. The result is increasing profits to the producers and increasing consumers' surplus to the consumer.

As is well known, Henry Ford has been the pioneer in this

¹ Taussig, *Principles of Economics*, p. 194.

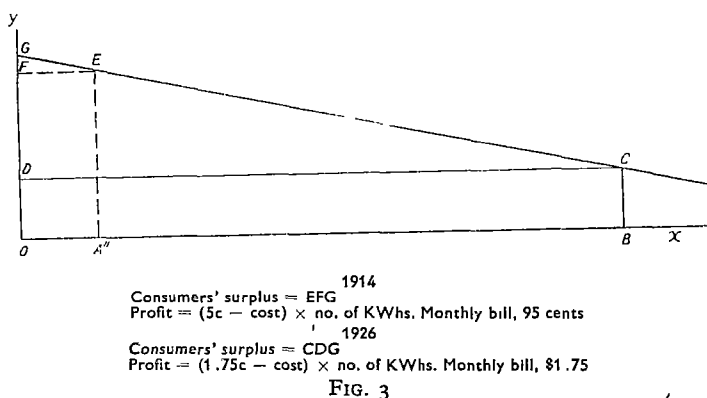
sphere of socialized mass production in the automobile industry. These principles operate where the demand for the commodity is elastic and where costs are susceptible to rapid reduction. They are especially applicable to industries of large overhead costs because, under these conditions, if a greatly increased output can be sold, the cost will greatly decline because the unit of overhead cost is in inverse proportion to the output. Thus if in a certain industry the overhead costs were 70 per cent, and the prime costs 30 per cent of total costs, if the output could be increased fivefold, the unit cost would decrease to only 44 per cent to what it formerly was. These principles, which were familiar to economists in the technical terms of the text-books, were discovered by practical railroad men when they found that by establishing differential rates for different classes of freight, and carrying certain articles for less than the cost of transporting them, they could make more money than when they charged for the articles an amount covering their actual cost of transportation. It is unfortunate that economic theory had been specialized as a pure academic discipline, so that there was not developed the close connection between pure and applied science which would have facilitated the expansion of the railroad industry and enabled it at an earlier period to economize in the public interest.

The latest conflict between classical economic theory and the Newer Capitalism is now being waged in the field of electric production and giant power. The power industry in the United States has in general followed the classical tradition. The first point of equilibrium between price and cost has been taken as the normal market price. Initiative in price reductions as a precondition of cost reduction and the establishment of newer and lower equilibrium points has been left to publicly owned and operated enterprises like those of the Ontario Hydro, the Los Angeles Power and Light, and other large-scale state or municipal enterprises. It almost seems as if Marshall's analysis were prophetic, as if enlightened public interference were necessary in the case of natural monopolies like the hydro-electric industry to achieve the far-sighted economic statesman-

ship such as has been exhibited in the publicly operated electric plants and the automobile and certain other large-scale competitive industries.

Fig. 3 is a graphic illustration of how an industry producing a commodity for which the demand is highly elastic can reduce costs greatly without loss to the producers.

In line with the statement that the Newer Capitalism represents a recognition of radical changes in the proportions of the fundamental factors is a contemporary condition or



attitude which has been called the new Malthusianism. (The theory of Malthus was that population tends to increase faster than the food supply; and that therefore the food supply is the limiting factor in a developing complex. The new economic analysis holds that the limiting factor is not the food supply but minerals, sources of power, and especially lubricants for the vast machines which function as the chief productive agents in the era of mass production.¹ Under these conditions of mass production and wide markets, and the necessity for free trade and efficient distribution, the limiting factors are not agricultural products or the supply of land, but mineral resources, power, broad statesmanship, and socialized policy. The opposing forces of the Newer Capitalism as a system of socialized production are not decreasing return from land, but short-sighted quest

¹ Cf. *Papers and Proceedings of the Thirty-seventh Annual Meeting of the American Economic Association, Second Session.*

for profits, nationalism, militarism, practical politics, and ignorant leadership.)

As was pointed out in the early part of this chapter, the term Newer Capitalism does not apply to a complete and consciously developed system of economics. There is no theory of consumption, except that consumption is a necessary condition of continued production. There is no theory of distribution, except a rather vague feeling that distribution has not been as well managed as production, and that distribution must somehow be modified in order that goods may be consumed as a condition of further production. The Newer Capitalism is further defective in that it involves no qualitative considerations. Production is carried on as a means of increasing physical output and making money, but there is none of the higher philosophical or aesthetic criticism of the quality of the product. The analysis, therefore, is carried on upon the more superficial levels. The ultimates and ultimate values are ignored. Finally, the trends of the Newer Capitalism are inconsistent with the institutions assumed. It starts out with private property and contract, inheritance, the profit-taking point of view, and ends in analysis of natural resources, inventions, and social demand. The final need is for integration and for socialization, which, although realized in the case of many outstanding industrial leaders, may eventually necessitate a more collectivistic institutional order.

The spread of the new system is an individual, voluntary affair, although, as pointed out above, a policy of high wages is not suitable unless it is adopted by practically all employers. Newer Capitalism, while its fundamental principles may be sound, may yet be unrealizable under individualism. To put them into effect there may be necessary the uniformity of policy that can come only from centralized education and centralized planning or control. In other words, the mechanism of collectivism may be necessary in order to realize the enlightened principles of the Newer Capitalism. The other defect of the Newer Capitalism as it is represented to-day, its lack of ultimate values as standards for social policy, may be remedied by accepting the contributions of the welfare economists.

CHAPTER X

ECONOMIC THEORY AND ECONOMIC HISTORY

THE historic economic theories furnish the material out of which is constructed the economic attitudes of the present. The theories which have been discussed, especially beginning with classicism and including the Newer Capitalism, form the basis for modern conservative and orthodox ideas. The types of theory which will be expounded from now on represent on the whole liberal or radical reactions against the traditional orthodox economics. The purpose of this study is not to give a complete exposition of historical economic theories, but to review the history of economic thought in order to secure materials for a reconstructive synthesis of economic theories. Since I have already developed from historical studies the concept which has been sought, it will be my purpose from now on to use types of economic theory as illustrations of the central thesis rather than as merely material for another exposition.

(The historical economists, as is well known, have emphasized the relativity of economic theories. This study also follows the same line of approach.) Economic theory, instead of being a series of universal laws objectively extracted from external phenomena, appears to have had a large subjective element. It was to a considerable extent the expression of the author's own personality and training. Thus early classical economics which centred around the doctrine of Adam Smith was largely the product of a philosopher and logician who was greatly interested in the stirring events of his own time. Later classicism centring around the doctrines of Ricardo was the theory of a successful stockbroker who was also a brilliant logician. Marginalist economics was largely the product of men who were trained in mathematics, and who therefore were seeking an exact formulation of ideas on industrial matters. Pecuniary analysis is the same doctrine presented from the point of

view of the profit-seeking financier. Historical economics, or as Boucke has called it, historism, is the general name applied to the study of economics made by men who first of all were trained in history. Some of the English classical economists, especially Smith and Malthus, were well read in history. But they used historical facts to illustrate conclusions reached by *a priori* reasonings. The German historical economists attempted to reach economic generalizations through purely historical induction. Their historical studies made them react against the classical formulas, since they saw that these formulas did not apply in earlier ages or in geographical regions where the conditions were different from those in Great Britain. The first reaction against the classicists, then, was to deny the universality of their generalizations. The study of economic stages, however, made possible a partial reconciliation with classicism. The classical economics were generalizations true of the modern era, the era of specialization, exchange, and production for a market regulated by the money economy. The ideas of Roscher, who looked upon the classical economics as making rational the modern age, were superseded by the view that the modern age itself was not perfect; that for some of the great problems, notably the labour problem, orthodox economists had no solution to offer; and that the modern era itself was not final, but would be succeeded by others. The result was a denial of the validity of the classical generalizations for past times and probably for the future. Instead, there developed a theory of the relativity of economic laws or theories to the historical conditions. This, as we have noted, developed naturally out of the interest in historical studies, the study of jurisprudence and the evolution of language—the study of comparative philology, which developed in Germany about the middle of the nineteenth century. The classical economists spoke much of the time element. Their theories were supposed to be true in the “long run.” But this meant merely the time required to effect an equation of market price with normal price or for competition to eliminate the effect of disturbances, which, in

the early classical period probably required only a few years, the length of time varying in proportion to the extent of the roundabout or capitalistic method. To the historical economist, however, the time method was something different. It represented stages in economic development or eras in the history of civilization. One source of confusion in economic analysis is this vague reference to the time element, the lack of definition of terms. There should be some definite understanding as to time factors from the day-by-day reckonings of the stock-broker to the "short time" and "long time" credit of the bankers, the "long run" of the classical economists, the period of economic planning of the giant corporation, the time scope of governmental policies, the economic stages of the historians, and the historic and prehistoric eras of Veblen and the anthropologists. A "science" which treats the relatively short period of the classical economists as the "long run" will end in confusion when it tries to reconcile the British logicians and normative thinkers with the German historians and others who have adopted the genetic approach.

The early German scholars who reacted against the classical English economists were trained in philosophy as well as history. The dominant philosophy in the universities at this time was that of Hegel. This was idealistic. It was super-individualistic; it dealt with the human spirit as a whole, conceived as evolving according to a determined cycle of self-development. Thus the German philosophy was in harmony with the metaphysical theory of the state. The unit of German thought thus became society rather than the individual; and their social philosophy tended toward the organic rather than the atomic.

This university training in history and idealistic philosophy probably accounts in part for the reaction of the historical economists against the psychology assumed by the English classicists and by the marginist economists. They revolted against the doctrine of the economic man. In the words of Gide and Rist, "as the historians justly pointed out, personal interest is far from being the sole motive, even in the economic

world. The motives here, as elsewhere, are extremely varied; vanity, the desire for glory, pleasure afforded by the work itself, the sense of duty, pity, benevolence, love of kin, or simply custom."¹ Thus in training and preconceptions the German historical economists were in many ways a contrast to the classical English economists—their training in an idealistic philosophy, the Hegelian idea of men as mere particles in a unified, evolving human spirit; the state as a metaphysical, super-individual reality; the long-time approach.

Furthermore, the German historical economists were nationalists, in contrast to the international or cosmopolitan spirit of Adam Smith and his followers in England and France. This may be due, as Boucke suggests, to the fact that German economics carried on to some extent the theories of Cameralism, and to the fact that the German states were behind the British in economic development. The German middle class relied more on the government to provide industrial initiative and bring about national prosperity. This again was part of the tradition of Cameralism. The government had developed something like a merit system in public administration. The ablest of the university men were given opportunities for careers in the field of public administration. In Great Britain largely a reverse trend had developed. The tradition from the Stuarts for extravagance and inefficiency and the individualism in business, science, and invention had established the opposite trend from that in Germany.

To what extent the reaction of German economists to the orthodox English school was a subconscious patriotic revolt against an alien intellectual dominance it is difficult to say. But it is a curious fact that many of the radicals who revolted against the more prosperous and advanced industrialist British were foreigners or the descendants of foreigners. Cliffe Leslie, Ingram, Carey, and Mr. G. B. Shaw are Irish or the sons of Irishmen. Rae was an expatriated Scotchman. Marx was a Jew who resided in England. Veblen, a son of a Norwegian

¹ Gide, C., and Rist, *History of Economic Doctrines*, p. 393.

immigrant. The first school which as a whole reacted against British orthodox economics was mainly German. This suggestion of nationalistic bias in economic theory points to the need of thorough biographical study if one wishes to develop a relativistic approach to economic theory. The bias of nationality, of class, of training, and of personality, may go far towards explaining differences in economic theories. In so far as this is true, economic theory is more akin to literature and literary criticism than to the sciences of mathematics, astronomy, and physics.

But to return to the ~~characteristics of the historical economics~~. The German historians, in reacting against the generalizations of the English classical economists, reacted against their ~~method of deduction~~. Since the classicists had relied mainly on deduction, they emphasized induction. The younger group of historical economists centring around Gustave Schmoller attempted to work out economic generalizations by means of exhaustive collections of economic facts. This brought valuable indirect results through its stimulating and liberalizing influence, and its counteraction of a tendency toward over-abstraction, like the classical economic man. But this method was open to criticism, because, as many have pointed out, correct thinking requires both deduction and induction; any effective method must combine a fair amount of both. Bagehot's criticism of this method is cogent.¹ Bagehot points out that there are two methods of inductive research, one of which he calls the "enumerative or all-case method" and the other "the single-case" method. Neither of these will work without a preliminary theory. The all-case method for perfect induction is impossible, because no one can accumulate all the facts on the subject before he begins to reason. Science develops on the basis of the knowledge of a limited number of facts combined with a brilliant hypothesis or discovery. The second method that Bagehot describes, the single-case method, is an attempt to analyse each group of facts separately, as,

¹ Bagehot, *Postulates of Political Economy*, pp. 17-24.

for example, the facts having to do with the panic of 1866, and thus attempt to explain it. But you cannot explain such a group of facts without a preliminary theory. The gist of the matter seems to be that the historians in reacting against the conclusions of the economists reacted against the general deductive method they employed instead of attacking the premises, the soundness or unsoundness of which leads to a sound or unsound conclusion by the use of that method. And the historians in reacting against the general method attempted to apply one, the method of the perfect induction, which is impossible. Spann asserts that the German historical economists did not fully appreciate the real point of opposition between themselves and the English classicists. The real conflict is between atomic individualism and an organized society; the classical economist visualizing the unrelated individual seeking his own self-interest, but working for the welfare of the group because of the universal, mechanical laws of the market; and the historical economists rejecting or ignoring the "laws" of value and distribution, and seeking a better organization out of a developing and imperfectly organized system of interrelated elements. The English system is a non-ethical, mechanical, market equilibrium system; the German historical school stands for social organization and social reform on the basis of an established philosophy and ethics.¹

The German school, however, failed to give positive and specific generalizations in place of the laws of value and distribution of the classicists. Schmoller was in quest of universal economic laws but thought that such laws were not discoverable by classical methods. Bücher attempted by an historical method to study the laws of economic development. The latest critic of universal laws, Dr. Har, in his *Social Laws*, holds that there are no universal laws in any of the social sciences, neither in history, nor sociology, nor economics. There is a small body of valid empirical correlations, and there are useful generalizations varying in scope from temporary precepts to principles

¹ Spann, O., *The History of Economics*, chapter xi.

of wide usefulness, such as the principle of diminishing utility, etc.

Har maintains that there are no laws of historical development, no necessary succession of economic stages, no invariable order of procedure in historical institutions. Historic institutions are the emblems of value attitudes, the things for which people live. The variety of historical situations enriches the personal life of the individual by giving him an opportunity to impersonate imaginatively the characters of history, and thus fit into an environment which is more congenial to his temperament. This retirement into historical scenes enlarges the circle of acquaintance and lifts up the mental horizon. But no two historical epochs are exactly alike. And if there is no invariable order in historical events the attempt to deduce positive laws from actual historical sequences is futile. "The study of historical progression is better suited to the building of interests than to the revelation of necessary law." According to Har, historical studies yield a few philosophic generalizations, such as Compté's law of three states and Hegel's idealistic version of the dialectical progress.¹

There is another criticism of the historical economist which deserves mention, although I do not entirely agree with it. The aim of the historian was first to give an exact, realistic picture of society. At this stage there seems to be some confusion in the method. Description is by some identified with explanation. Others, like Gide and Rist,² maintain that description is not explanation. Explanation is concrete description followed by exposition of causes. Explanation requires generalization, and generalization is the province of science. Thus history itself is in need of explanation, which science must furnish. "History tells of sequences and coincidences; but reason alone can interpret and draw lessons from them." The generalizations of the historians were themselves highly questionable. Bücher's historic parallelism in the stages of development is shaky;

¹ Har, K. D., *Social Laws*, chapters ix, x.

² Gide, C., and Rist, *History of Economic Doctrines*, p. 401.

and Roscher's theory that a nation, like an organism, passes through successive stages of youth, maturity, and old age is a rather fantastic, nationalistic analogy.

Turning to a first-hand approach by way of both criticism and appreciation of the historical economists, it is evident that the method of this study is largely historical. It differs from that of the Germans in that it employs both induction and deduction, and is cosmopolitan rather than nationalistic. The contrast between classicism and German historical economics is transcended by the conception that the major premises in the reasoning of the English classical economists were the specific historical conditions of the England of that day, or were the conditions, like free trade, which were being approached by the trend of events. The English economists themselves recognized the temporary historical element in their systems, but did not emphasize it, with the result that generalizations arising out of the Corn Laws controversy and other contemporary problems were generalized into principles supposed to be universally valid. The assumptions of the classicists were largely the historical conditions of the times. Thus the assumption of the mobility of labour was true in the days of Ricardo relatively to the era of slave or manorial economy, and possibly also to the twentieth-century corporate economy, which requires a large amount of skilled labour, which again requires a long period of training like that of the engineer and chemist. Under these conditions labour is not mobile. Capital invested in professional training and skill is like capital invested in a railroad track or a dairy barn. It is sunk capital. Hence it is probable that labour to-day is on the whole less mobile at least in some respects than in the days of Ricardo.

Another assumption of the classicists which was based upon the historical conditions was the great mobility of capital. The smaller plants and shorter period of return from investments made capital turnover more rapid and capital more fluid than in the days of giant industrial plants and long-time plan-

ning. Other assumptions of the classicists, as we have pointed out before, were based on the peculiar conditions and secular trends of the time. Among these were the need of loan funds and the desirability of individual initiative and enterprise. Free competition was also an assumption in harmony with historic facts, for in the age of classical economics in the industrial world itself, as far as internal trade was concerned, the principle of competition was very active. *Laissez-faire* also was a sensible policy under a corrupt and extravagant monarchy like the Stuarts. Private property and freedom of contract were in harmony with the true historic spirit, when public monopoly would have wasted the social surplus on a corrupt Court. The static assumption of the classical analysis has been criticized as "abstractly isolative." It has also been defended as an example of the laboratory method. In the laboratory, the quantity of one element is kept constant while others are varied in order to get a quantitative statement of correlations. The static method in economic theory has been described as using the imagination of the economist as a laboratory. Yet this static method may conform to historic realities when one's important factor is actually static, as the supply of land in Europe before the great emigration of the nineteenth century, and before cheap transportation and international peace brought the remote frontier lands of the new world into the sphere of the European economy. In other words, the method of static analysis as applied to the subject of rent is not unhistoric as long as the supply of land is inelastic, there are a succession of bad harvests, population is increasing, and wages are falling; and individualism, or atomic individualism, which is historically intelligible, when it functions in breaking down the privileges of a class the social contributions of which had been already rendered, and which was becoming parasitic. Finally, there is historic justification for the factors used by the classical economists in economic analysis. Even the specific sense in which^F these factors were defined was an historical product, the reflex of the Corn Laws controversy. The German historical

economists were correct, however, in insisting that generalizations based on the short historic period and under peculiar local conditions would not be applicable in different times and situations.

There is another criticism which may be made against the German historical economists in their criticism of the excessive abstraction in British economics. The terms in which they express the reaction from abstractness seem vague and undefined. In contrast to economic theory, they would emphasize "*concrete economic reality*," the "*real conditions of economic life*," "*historic tendencies*," "*new facts*," "*economic phenomena en masse*," "the varied and changeable *phenomena of the economic world*," "the *changing needs* of the times," "the *changing nature of the social environment*," "the *concrete life* of the present," "the need of an historical *explanation*," the "storm-tossed evolution of *reality*," "*the march of events*," "*actual life*," "*evolution*." In opposition to abstract reasoning, the critics use a series of terms that themselves are abstract, or at least vague and undefined. All of the terms italicized are of this nature except the term "*evolution*," which was given a scientific meaning by Darwin. This criticism of the vague literary methods of the historians is based upon the idea that the first step towards a more exact science is a more careful definition of terms.

Another criticism is directed against the criticism of the historical economists made by Gide and Rist. The historians attempted a realistic approach to economics through detailed description and statistical approach. Gide and Rist, as quoted above, assert that description is not explanation, and that science must supplement history. This criticism is based apparently on a vague conception of causation. What do we mean by *explanation*? That depends on our conception of causation. In the classical analysis explanation meant the description of a few major factors or groups of factors which we may call the units of analysis. The most important factor, e.g. labour, was then taken as the explanation of all the others. The modern

theory of causation is that of the simultaneous interaction of a host of interconnected factors. These complementary or mutually interdependent factors are varying in size or quantity at different rates. Since they are interdependent and complementary, each depends for its existence on the others, although the dependence is minimized by the possibility of the substitution of one for the other, as of machinery for labour. But since there is a limit to the process of substitution, all the factors, if the system is to function fully and freely, must evolve in a certain proportion. This is Davenport's law of the normal proportion of factors. What should be the proportion in any given situation is the main problem of realistic economics. The first step towards this is concrete description. The concrete descriptions of past situations constitute history. The scarcity of any factor in relation to this ideal proportion is a measure of its causal potency or of its economic value. The aim of economic study is to determine the optimum proportion of specific factors in a given economic situation. Our criticism of the historical economists just made is that while criticizing the classical economists for employing only general and abstract factors of analysis like land, labour, and capital, they did not themselves break up *concrete economic reality* into a number of specific factors which could be studied and evaluated according to the specific needs of the time—that is, according to the optimum proportion available and the actual proportion of factors that existed. For purposes of analysis of the history of economic thought, I have already pointed out that a useful list of specific factors would include the following; but it should be the function of historical and realistic economics to classify the data at any time into useful and practical categories.¹

The method attempted in this study is that of a combination of the methods of concrete description, or historic induction and deductive reasoning. It is an attempt at a synthetic reconstruction of economic theory on the basis of economic history. Deductive analysis proceeds from the point of view of the law

¹ Cf. chapter i.

of the normal proportion of factors, and the subordinate aspects or principles of this law in the field of production, such as increasing, diminishing, and constant returns. In the field of demand or consumption, the law of proportions is represented by the principle of diminishing utility; and subordinate aspects of this principle, such as elastic or inelastic demand. These principles are considered as standards or tools of economic analysis and not as universal laws. If with the aid of statistics as an instrument they are applied as standards or measurements to the material furnished by realistic description and history, it is held that men may be more successful in their control of the material conditions of welfare. Causation, then, which in the modern interpretation is the simultaneous interaction of hosts of factors, is to be sought in detailed realistic description of the economic reporters and the historians.

The historians recording the impressions and opinions of the time break up the economic complex into its logical, manageable factors. They do this, as was mentioned in an early chapter of this study, by describing the conflicts of classes. The classes or groups of the historians become the abstract factors of the economists. In place of land, labour, capital, government, management, and money, they narrate such matters as the rise of land ownership, peasant uprisings, economic development, dynastic wars and revolutions, explorations, conquests, the growth of privileged classes. If the historians are trained in the Ricardian or Marxian economics, and have a bent for philosophical generalizations, they may develop the economic interpretation of history. Thus realistic description and history record the changes which represent the multitudinous illustrations of the law of proportions. Causation is thus to be sought in the specific events of history, especially those which represent the injection of new elements into the complex so that the equilibrium of factoral proportions is disturbed. This may be political history in which the factor in greatest demand is the strong ruler, as in the age of the development of the absolute monarchy. In the modern era the

pivotal factor may be a new invention or discovery. Typically, the discovery of new sources of power disturbs the prevailing equilibrium and initiates a secular trend which terminates on the attainment of equilibrium of factors in a new proportion. Thus the discovery of coal and the invention of the steam engine conditioned the complex secular trend of the Industrial Revolution, with its need for and emphasis on the accumulation of capital (rationalized into the wages fund theory), its great need for industrial management and enterprise (rationalized into the economic man); and, in its later developments, eventuating into a need for a wider market (rationalized into a need for economic nationalism), and the need for a greater home market (scientifically theorized into the doctrine of limited consumers' purchasing power and the beneficence of high wages).

Another example of the injection of a new element acting as a cause of a secular trend is the discovery of petroleum. This, followed by the invention of the inner combustion engine, led to the modern secular trend in the development of motor transportation. But other factors entered also into the causal nexus. The growth of population and wealth made inevitable the movement for good roads. The development of engineering made possible the hard-surfaced road suitable for the new power-driven vehicles. And so the manufacturers of wagons and carriages went in to make the new horseless vehicle. A major discovery of a new source of power, a new major invention to utilize the new power, the necessary background of general technical development, the basis in material culture, the growth of population and wealth, and the emergence of the Man of the Era, like Henry Ford, these are some of the chief factors in the new economic dispensation. The impulse of opportunity given to the scarcer economic, social, and personal factors, the higher economic value attached to their relative scarcity, may be cited as stimulating forces of the new movement. Of course, back of these causal agents and conditions are the organic needs and the social wants. If one wishes to trace

causation back to ultimates, there is the modern conception of the multi-level approach, or the ultimate causal explanation gained through an integral study of the social and physical sciences. The economic causes may be traced back as far as the special purpose requires.

CHAPTER XI

WELFARE ECONOMICS

THE opponents of orthodox economics, or economics which tend to justify individualistic capitalism, are classified in this study under the heads of historical economists, welfare economists, institutionalists, and collectivists. The outstanding leader of welfare economics is J. A. Hobson. It is our problem to apply to this class of economic theory the same standards that were used in analysing other types. In attempting to explain the peculiarities of writers on economic subjects we have used a standard partly personal, historical, and relativistic, and partly abstract and logical. From the first point of view, economic theory is explained as an illustration of traditional modes of thought due to early training and education, fortified by habit. Or else it is a rationalization, often unconscious, of the author's personal or class interest. From the second point of view, economic theory may be an expression of the scientific method aiming at generalizations which are useful as a basis of public or social policy. Much economic theory contains elements of these three modes of thinking.

Returning to the relativistic mode of approach, economic theories might be classified as reactions upon industrial life of different psychological types. Of course, all types of economic theory are forms of expression of what Shānger calls the theoretical man. Mercantilism might be classified as an expression of the theoretical man and the man of power. Physiocracy and early classical economics might be classified as products of the theoretical man and the social man. Later classical economics and the newer capitalism might be classified as expressions of the theoretical man and the economic man. Marginism would be the expression of the theoretical man who had been trained in mathematics and in the idea that the social sciences were to be developed into exact sciences. Historical

economics might be taken as the expression of the social man and the theoretical man who approached his subject from the point of view of training in history and idealistic philosophy. In line with this method of approach, welfare economics might be defined as the expression of a personality who combines the characteristics of the theoretical man, the social man, and the artistic man.

An author's personal point of view may often be determined by his class, family, early education, and the influential personalities with whom he comes in contact in his earlier years. Hobson came from a good upper middle-class family, and received his university training in the classics at Oxford during the late seventies. This was the period of the decline of the Ricardian system. The reaction against Ricardianism at Oxford took the form of the humanistic approach. At Oxford the humanities held the position of honour. The tradition of Plato and Aristotle was dominant; and there was an atmosphere of literary and artistic culture. The men who were most influential in the Oxford of the seventies were literary and artistic idealists. Among these, John Ruskin was distinguished for literary and artistic criticism and for an idealistic attack upon the Ricardian economics. Ruskin's economic writings included *Unto This Last*, *Fors Clavigera*, and *Munera Pulveris*. Carlyle belonged to the same group in his essays on *Chartism* and *Latter-Day Pamphlets*, and *Past and Present*. This undergraduate period in Hobson's life was also the period of Arnold Toynbee's residence at Oxford. Toynbee combined an ethical and religious attitude with the historical approach to economics. All of these men had an enthusiastic interest in social reform, and all of them approached economics from the point of view of ethics. They were living in a time when Ricardianism was ceasing to be satisfactory as an explanation of industrial life under the increasing perception of the social evils that had accompanied the industrial expansion of England. Another member of the same type was William Morris, an artist who supported socialism because he hated the ugliness of industrial England.

Shaw characterizes Morris' *News from Nowhere* as the last of all the Utopias. The same type of ethical social criticism is found in the novels of Charles Dickens. John Dewey maintains that revolt against social evils has taken one of two forms, that of an aesthetic revolt and that of a natural science revolt.

*The thesis of this chapter is that J. A. Hobson represents the aesthetic and ethical revolt in economic theory against the evils of economic inequality and individualistic capitalism. Hobson has continued to labour throughout his life in the spirit of reformatory zeal that he developed in his undergraduate days. For seventeen years after his graduation at Oxford he was a teacher. For seven years he taught classics, and then was engaged for ten years in giving university extension lectures in English literature and economics to English working-class people. Hobson was only one of a great number of liberals and reformers. He is significant for our purpose as the only one of the group of Oxford idealists who devoted himself specifically to the problem of economic theory. Starting, then, from Hobson's bent toward literary and artistic humanism and his humanitarianism, his approach to economic theory is from the point of view of ethics. This is not ethics in the narrow sense as the science of rights and duties, but a larger subject which deals with ultimate valuations. In this sense ethics is at one with aesthetics. It is notable that Professor Wolfe in his article "On the Content of Welfare"¹ holds that "both ethics and economics are in the last analysis branches of aesthetics."

*Welfare economics, then, is economic theory in the light of ultimate values. These ultimate values Hobson approaches by means of ethics and aesthetics rather than through the methods of logic or exact science. This is the chief distinction from that of every other type of theory so far considered. Hobson's approach is qualitative rather than quantitative. In other words, ultimate values are not measurable by any quantitative standard. It is a matter of better or worse rather than of more or less. In this respect welfare economics is in

¹ Wolfe, A. B., *American Economic Review*, June 1931.

striking contrast to the various types of orthodox theory. We are all familiar with Mitchell's three levels of economic analysis: the money level, the goods level, and the psychic level. Hobson's welfare economics constitutes the fourth level of economic analysis. The money level or pecuniary income level is the most definite, since it disregards all qualities and adopts a dollar yard-stick for its quantitative measurement. The goods, or physical volume of commodities standard, is more profound but less measurable and exact because of the varieties of weights and measures for physical products. This level of approach is more profound because physical commodities have a direct causal relationship to the satisfaction of wants. A still more profound approach is that on the psychic level. This is the immediate and vital norm of economic results, but it is beyond exact measurement to anyone except a disciple of Bentham. The welfare level of economic analysis is a variant of the psychic level. On the psychic level individual desire is the ultimate. Utility is that which is desired. Psychic income is the gratification of wants without an ethical or aesthetic criticism or valuation of the nature of these wants. The welfare analysis attempts to go still deeper. It criticizes the desires from the point of view of the desirable. In other words, welfare economics is the approach to industry from the point of view of convictions on ultimate values. In defence of Hobson's approach it may be said that the superficial approaches of the first two levels are the only ones which are susceptible of exact measurement. The profounder ones of psychic income and total or social welfare are approachable only through qualitative standards. Science in modern economics has come to mean market price and market statistics—the superficial analysis. Welfare economics attempts an evaluation from the point of view of the more profound but the less measurable. This again is an example of the literary and artistic or humanistic approach. A poet, painter, dramatist, or novelist is great not because of the number of books or plays or pictures produced, but because of qualitative distinction of beauty or expressiveness. Shakespeare is

great because of the high poetic and dramatic quality of his plays. But Wordsworth is rated high by critics for work that could be published in a score of pages. And Harold Bell Wright, with his long array of novels, is not supposed to be in the class of Thornton Wilder, with his *Bridge of San Luis Rey* and *The Woman of Andros*. Differences not measurable by a quantitative standard distinguish the first class from inferior work in the field of the fine arts. In the words of Browning:

Oh, the little more, and how much it is!
And the little less, and what worlds away!¹

Or to paraphrase a saying of R. L. Stevenson, "The greatest things in our lives are best known and least definable." The moment we touch them we slip out of logic (and mathematics) into poetry. In other words, it is impossible, at least under our present technique, to measure qualitative differences.

From this qualitative, ethical, and aesthetic, and humanitarian point of view it is not difficult to account for Hobson's opposition to the different schools of orthodox economics. Hobson's objection to the classical theory is that their assumption of free competition no longer holds. He is himself a social reformer, like Adam Smith, only working under the conditions of a different combination and proportion of economic factors. Under conditions of free competition and the mobility of capital and labour, individual economic activity will be regulated and socialized by the money economy and the free market. Men will prosper as they serve others. Hence the early ethical justification of the economic man. But with the growth of economic organization, with the rise of the corporation in a large part of the industrial field, with the development of the indirect, capitalistic method of production and the long-time period in which market price might be equated with "natural" price, and finally with the expansion of governmental activities and the development of rigid, inelastic elements in the economic order, the old automatic market adjustment of individualistic

¹ Browning, Robert, *By the Fireside*.

capitalism no longer works. There is a mixture of sheltered and unsheltered industries, of flexible and inflexible, of mutable and immutable elements, of dynamic and static occupations, of monopolistic and competitive enterprises, so that unregulated individualism would be resolved into selfish opportunism and social confusion. Classical economic theory under these conditions furnishes little help. It has become increasingly remote and abstract and hypothetical. It cannot serve as a basis for the solution of the labour problem that the humanitarian demands.

Hobson's opposition to pecuniary logic and marginism is also explicable by his ethical and aesthetic approach. The market price is not an index of welfare; the pecuniary standard is not an index of ultimate human utilities and costs. Both of these types of economic approach are examples of the superficial and quantitative method. Professor Homan is at a loss to account for the vigour of Hobson's attack on the marginists.¹ This is explained, however, by his aesthetic, qualitative approach. He objects to having the decisions on questions of broad social policy determined by a series of little quantitative adjustments. Instead of decision by mathematically measurable details he would substitute the organic approach of the creative artist. This point was discussed earlier in the criticism of marginism. The adjustments of economic life, according to Hobson, are made not at the margins but at the centres. They are quantitative implications of a new organic plan. The able business executive and the efficient housewife are thus creative artists rather than mathematical calculators.²

Hobson's objection to the newer capitalism would also be explicable by his ethical and aesthetic approach. If economic life is to be socialized under the leadership of successful business men there will be lacking the distinction between the desired and the desirable, that is the essence of the welfare approach. The ethics of mass production still remain on the

¹ Homan, Paul T., *Contemporary Economic Thought*, p. 328.

² *Free Thought in the Social Sciences*, pp. 128-9.

quantitative level. So much for a rather general hypothetical exposition of welfare economics which is based on induction from a single case, the system of J. A. Hobson.

It may be well to summarize more specifically the economic doctrines of Hobson. He evaluates industry by the standard of welfare. The test of welfare is the good life. This is a matter of ultimate valuation. There is a measure of common agreement by people of intelligence and culture, and by specialists in various lines which is precipitated into the general sense of mankind. The difficulty is to secure an objective standard of welfare. This standard at present is necessarily vague and unsatisfactory; but with the growth of science, with increasing knowledge of anthropology, psychology, biology, chemistry, and other sciences, with the diffusion of education and civilization, the body of agreement which constitutes the common sense of mankind will grow, so that the standard of welfare will become more definite and applicable.

With this vague but improvable standard, Hobson proceeds to a valuation of the processes of production and consumption from the point of view of human costs and human utilities. Production involves human costs, but in some cases involves positive utilities. Consumption occasions utilities, but the use of undesirable goods (or "illth") involves human costs. There results a sort of sublimated utilitarianism. The formula would run as follows:

$$(\text{Utility of consumption} - \text{cost of consumption}) - (\text{cost of production} - \text{utilities of production}) = \text{welfare}$$

Turning to an economic analysis of these principles as applied to the factors of land, labour, and capital, we have the following results. Land ownership or rent involves no human cost. Artistic work is essentially pleasurable. It involves utilities in itself. The necessary payment to an artist is merely his keep. The same is true of scientific activity, and only to a lesser extent of the work of the inventor and the professional, official, and managerial classes. Their work, according to Hobson, is

varied, pleasurable, and creative. Labour is costly in proportion as it is routine.

The cost of saving or supplying capital needs is in general inverse to the size of the personal income. Savings from large incomes, which involve no restriction of necessary expenditure, are without cost. Saving is automatic. Much middle-class saving is the same type. So the human analysis of cost reaches a different result from the conventional cost accounts of the orthodox economists. There are high human costs involved in the labour of the great mass of the people and the saving that is done by the poor. But much of the labour performed by the upper and professional classes contains within itself human satisfactions which more than overbalance the strain and unpleasantness of the work; and much of the savings of the rich is automatic or costless in the human or psychic sense. Under our capitalistic system wealth is not distributed in any proportion to the human cost of production.

Turning to the question of the utilities of consumption, there are three aspects of the subject to be considered; first, there should be provision for organic needs, for health and efficiency; second, there should be provision for industrial expansion, if necessary, payments in excess of organic needs as inducement for superior efficiency; thus there is a surplus above these requirements. This is the social surplus for consumption. It may be spent conventionally or wastefully, or it may represent the material means for the attainment of welfare. Goods should be distributed according to the human law of distribution which would distribute wealth on the one hand in relation to the human cost of production, and on the other hand in relation to capacity for use or enjoyment. The aim is to secure the minimum of human costs and the maximum of human welfare. This does not mean absolute equality; for the needs of some are greater than those of others, and some have greater capacity for consumption, that is, to realize pleasures or to utilize the leisure made possible by the greater efficiency in economic production.

Hobson's economic system is thus hostile to our present capitalistic organization of society, for under this system there is no approximation toward distributing the costs of industry according to ability to bear the costs, or to distribute goods or leisure among consumers according to their ability to extract pleasures or make the best use of their time. In view of this fact it will be necessary to substitute some sort of social control for the profit-making motive. Thus Hobson reaches a socialized, organic view in place of atomic individualism. In many respects he reminds one of the German historical economists. He is one with them in his ethical and sociological approach. In spite of his familiarity with the recent trends in social psychology it is hard for him to abandon the idea that society has some kind of a personality above that of free individuals. This metaphysical theory of society classes him with the German historical economists. In many ways, however, he has gone beyond them; he has sketched the possibility for further reform where German historical economics had broken down. Hobson has not shared the prejudice against the deductive method. Also he has transcended the nationalistic attitude of the Germans. His welfare economics is international in spirit. His qualitative approach and attitude of artistic valuation, his distinctive characteristic also distinguishes him from the German historical economists. But like them he believes in the possibility of social reform. The realization of the human law of distribution will be due to efficiency of social organization; and progress will arise in the change from a badly articulated or organized society to one better organized.

This belief in the possibility of social reform is closely related to Hobson's notion of economics as an art as well as a science. The mechanical equilibrium theory of the classicists was based upon the conception of immutable natural laws. Hobson speaks of the art and science of economics as a subdivision of the art and science of ethics. Thus social reform is conditioned on the absence of immutable laws of the classical type. This doctrine is in agreement with the latest analysis of social laws

by Dr. Har. According to this conclusion, it is proper to speak of a special subject as both a science and an art. There are no social laws of mathematical precision, but there are useful empirical generalizations.¹ Every activity presupposes working principles which may not be exact but which possess value as tools or standards. Beyond this the activity becomes an art. Thus we may speak of political science or the art of government; of rhetoric and the art of composition, of medical science and medical practice, of economic principles—the principle of the optimum proportion of factors, the Malthusian principle, the principle of increasing and decreasing returns, the principle of diminishing utility, the principles of elasticity and inelasticity of demand, the principles of the equalization of imports and exports—whether we treat these as separate rules or standards or as mere illustrations of the law of the proportion of factors, all these are the scientific elements which are useful for social reform or the organization of the industrial arts, just as a study of rhetoric is valuable as an aid to the art of composition and as a study of political science is helpful in the practice of the art of government. Hobson's attitude toward economics as a science and an art thus seems to be in harmony with the latest theories of social science. In the words of Har, "all social problems are problems of human values."²

Welfare economics, like other theories, has arisen under conditions of historical opportunism. That is, at a time when production has become very efficient and when there is a wide choice between more goods or more leisure, when the pressure of economic needs being in great measure satisfied, there is the question of the kind of non-economic activities which should occupy the energies of men. Thus welfare economics emerges at a time when such a theorizing, even if it has unscientific and fictitious elements, serves a useful purpose. Thus welfare economics, like the other types, may be an "as if" science. Physiocracy, using the fiction of the unique value of

¹ Har, K. D., *Social Laws*, chapter ix.

² Ibid., p. 213.

land, arose when agriculture was depressed, but when agricultural science made possible great improvements. The economic man was a fiction, but a useful generalization when there was still a great scarcity of goods necessary for organic welfare, but when natural resources and increasing population only awaited the accumulation of capital and the rise of managerial ability to effect the organization of large-scale production, which would increase the supply of needed goods. Welfare economics emerges when production has about caught up to the demands for economic goods that are needed as a means to the good life, and when the conditions of productive efficiency, large overhead costs, threaten to enslave men as consumers through the demands of machine production. This is the appropriate condition for aesthetic and philosophic valuation of the machine process, for the deliberation of the problem of more economic goods, or more personal freedom; of the comparative advantages of mechanism and personality, of wealth and life. The quantity production of physiocracy and classicism and the newer capitalism are followed appropriately by the qualitative analysis of the experts on ultimate values.

While Hobson has produced an economic system which attempts a profound analysis, and opens up issues for the consideration of which the time may be ripe, there are critics who question the practical value of his approach. Is it possible to find an objective criterion of welfare which will make attainable the ideal of a social harmony? As Professor Wolfe has pointed out, the standard of "common human nature" is hardly sufficiently objective basis for a standard of welfare. "Moral and aesthetic valuations derived from authority, tradition, and custom, are valid only for the culture in which those particular authorities, traditions, and customs hold sway. The real welfare problem is to determine whether the valuations fixed by a different culture are better or worse, by some unbiased objective criterion, if one can be found."¹ In Hobson's latest

¹ Wolfe, A. B., "On the Content of Welfare," *American Economic Review*, June 1931.

book, *Economics and Ethics*, he is fully aware of this difficulty. There is a perfect welter of conflicting subjective valuations. Since Hobson's ideal social harmony is a world harmony and his system international, there is the possibility of conflict that may arise from different national ideals and points of view. This is well illustrated in his chapter on Optimum Population.¹ Here the optimum is to be determined not by the quantity of population which would combine with a given amount of land and minerals and a given state of the industrial arts to produce the maximum per capital output of economic goods; but it is the optimum density of population which would make possible the greatest total welfare from a point of view of an assumed agreement on an ethical and aesthetic standard.

Perhaps even more fundamental than the question of the possibility of securing an acceptable international, inter-social standard is the question whether, after all, there is any objective basis for valuation. Is artistic excellence, for example, an objective fact, even if it is not quantitatively measurable, or is it a group convention based upon similar early training and conditioning? Is ultimate value capable of objective determination, or is it merely an abstraction of what each particular person finds joy in doing? Are there higher and lower values, or are higher values merely fictions which I prize? It may be that all valuation is relative to specific personality, that the spiritual world is nothing more than an ebullition of vitality and creative energy, a system of personal fictions superadded to the world of nature. In that case, creative activity in the spiritual world is the power to make the fictions seem real. On this sceptical hypothesis the world of values is merely a collection of pluralisms or independent systems, each centring about some dominant personality, as in the writings of Carlyle.² Is valuation merely the personal preference, the self-expression of some creative artist and his followers? Or is there some scientifically ascertainable hierarchy of values? Hobson's

¹ Hobson, J. A., *Economics and Ethics*, part iv, chapter vi.

² Carlyle, F. Cf. *Heroes and Hero-Worship*.

own chapter on this subject in *Economics and Ethics* is vague and non-committal. Perhaps the optimist will find grounds for faith in his perception of qualitative differences in works of art. Here is a distinction which is felt and perceived but scarcely definable. The great leaders of the humanist tradition at Oxford, like Ruskin and Arnold, affirmed qualitative standards, although they expounded them by examples or "touchstones" rather than by logical definition. Perhaps it is the artists' immediate perception of better and worse that gives ground for hope in the future decreasing vagueness and the more applicable form of the ethical and aesthetic standard of welfare. At any rate, if Hobson's economic system is true, it holds only for the "long run" in the sense in which no classical economist dreamed. How ultimate unanimity may be secured, how enough agreement may be precipitated as the "common sense of mankind" so as to form a basis of decision and action is the essence of the general social problem. Professor Wolfe suggests that the failure of sociology has been due to a too ambitious programme. "It is almost as impossible to illuminate all aspects of society at once with the white light of science as it is to light up the whole heavens with searchlights."¹ . . . "The integration itself must, after all, be selective and purposive, directed to the picking out of certain objectives and the solution of definite problems." It may be that a consensus on ultimate values will gradually rise out of agreements in the reports of expert committees who investigate specific problems. In other words, the fundamentals may emerge by induction through a synthesis of reports of co-operative researches by experts. Perhaps in the future some super-Wickersham Committee on ultimate values will report to the League of Nations the axioms or fundamentals for the political economy of the future. Or consensus may develop out of the progress and integration of science, the diffusion of education, and a growing critical knowledge of the actual evolution of public opinion and the technique of

¹ Wolfe, A. B., "On the Content of Welfare," *American Economic Review*, June 1931.

propaganda. At any rate, if some such approach as that outlined by Hobson were held to be essentially impracticable, the author of this study would not bid very high for the common stock of humanity in the spiritual Wall Street of the world.

Hobson's reaction against conservatism and orthodox economics is that of a liberal rather than that of a radical. He does not carry his revolt to the extreme of socialism or communism. This possibly is explicable by his views on psychology.¹ Homan has pointed out that Hobson's views on psychology have changed with the evolution of the science. His earlier work is based upon the assumption of the rationality of human nature common to the economic theory of that time. Later he appealed to Veblen's theory of conspicuous consumption and Tarde's theory of imitation. Later on he portrayed human nature as largely a matter of instinct, with special reference to the views of William McDougall. In his latest book, Hobson suggests that the direction of social reform will be determined by the kind of psychology that is accepted as valid. "The validity of modern socialistic and communistic principles and schemes turns upon the question of the nature and amount of the adaptability of human nature."² The relationship of welfare economics to socialism and collectivism in general will be taken up more fully in the discussions of the relation of economics to psychology in the following chapters. Hobson's remark has, I think, exposed the crux of the problem.

Just one more consideration, not the personal view of Hobson, but the approach of welfare economics of which he is the best representative. What would the typical welfare economist say as to the problem of the possibility of a general over-production of economic goods? The view advanced here is that the welfare economist would consistently hold to the possibility of a general over-production. Over-production would be production to the point where the human utility in consumption was less than the human cost in production. The

¹ Homan, P. T., *Contemporary Economic Thought*, pp. 335, 368-370.

² Hobson, J. A., *Economics and Ethics*, p. 218.

point would soon be reached in the case of the artist, for he would experience great opportunity cost in the way of displaced leisure for artistic activities. His voluntary economic activity would end when he had earned his keep,¹ like Thoreau at Walden, who allowed three months of the year for economic effort to supply his modest needs for the year, and so left himself free to devote the nine months to self-expression and the improvement of his mind. From this artistic point of view much of the mass production of modern times might be called over-production. Typically, the welfare economist would take issue with the later classicist on this subject of the possibility of a general over-production of economic goods. To the classicist production was carried on for the purpose of exchange. And goods, the human utility of which diminishes with the increase of quantity, will still exchange against each other at the same rate as long as the utility diminishes equally for all classes of goods. Hence, whatever the volume of goods, the exchange rate or the "value" remains without limit. But the artist is concerned with qualitative distinctions or values in use, the subjective *Wert* of the Austrians. And he estimates highly the cultural opportunities of leisure. The economic man, or Sombart's capitalist, on the other hand, does not envisage a limitation of demand or a satiation of economic (market) wants; for his purpose is self-expression or the attainment of distinction through his special function, the quantity output of goods for exchange, or a quantitative achievement measured by the pecuniary yard-stick. ~~~~~

¹ Cf. *Work and Wealth*, p. 44 (George Allen & Unwin Ltd.).

CHAPTER XII

INSTITUTIONAL ECONOMICS

ANOTHER form of revolt against the orthodox types of economic theory is what is termed rather vaguely institutional economics. This is the view that economic processes—the production, distribution, and consumption of goods—are determined not by economic laws but by economic institutions. The central fact that must be understood if one is to grasp this type of theory is the nature of institutions.

{Institutions are often defined as widespread habits, customs, and arrangements. Economic institutions, then, are widespread habits, customs, or arrangements in the production, distribution, and consumption of goods. According to Davenport, "Institutions are a working consensus of human thought or habit, a generally established attitude of mind and a generally adopted custom of action—as, for example, private property, inheritance, government, taxation, competition, and credit." . . . "merely qualities and attributes of the human factor in production." Institutions are, thus, in their nature mainly psychological.) Their locus is in the minds and nervous systems of particular men. Thus the monarchy is located not in the person of the monarch but in the habit pattern of obedience in the nervous systems of the subjects. If something happens to change this widespread and uniform habit of obedience and deference, the monarchy ceases to exist. Institutions, then, are stereotyped group habits in doing things, in thinking, or in expressing emotion (When these group habits have persisted for a long time, the accumulation of them is called civilization, or civilizations.) The total body of accumulated group habits or institutions is variously called the "social heritage," the "collective mind," or, more simply, "culture."

While institutions are thus mainly psychological in nature, they do not exhaust the whole field of psychology. Outside

of them there is the "original nature of man," the innate, instinctive, biological constitution. Thus the biological and the institutional represent the two factors of human nature. One element is the innate, the other a post-natal creation. One element represents original and indestructible nature; the other, variable and modifiable culture. One represents biological and physiological inheritance, the other social inheritance and social environment.

While psychology, or human nature, is something more than institutions, the view is also held that institutions are something more than psychological. Institutions are fixed habits, but they tend to become objectified into some durable or semi-permanent physical forms. Thus a habit of thinking and feeling with respect to a superhuman being and a future existence may be objectified into buildings, rituals, and symbols, Imparting instruction to young people may fall into fixed habits and routine, and may be objectified in grounds, buildings, apparatus, and the machinery of grades and credits. Ways of administering affairs of general interest also tend toward routine, and become objectified in the form of buildings, equipment, constitutions, and codified order of procedure. The result is religious, educational, and governmental institutions. If the psychological locus of institutions were to disappear, if the priests, educators, officials, and engineers should all suddenly die, the prevailing institutions could again be recreated in the habit responses of the oncoming generations because of the physical, objective element in institutions, the land, buildings, equipment, and the order of procedure written in books and constitutions, in the formularies, and the technique. Culture, then, is material and technological as well as psychological. It includes durable material and technological as well as psychological elements or habit patterns.

The main distinction in this analysis of institutions is that which subdivides human nature into the biological and the cultural. The biological includes the original and indestructible properties of human nature. The cultural includes the variable

factors, partly the modes in which original nature is expressed, and possibly in part the efflorescence, the field of free creative activity after the fundamental biological needs are met.

Perhaps this main distinction may be elucidated by a brief survey of the relation of economics to psychology. The earlier classical economists emphasized the rationality, the enlightened foresight of men. Hence they and their philosophical descendants have had much to say about economic motives and incentives. Now, the term "motive" is in contrast to the term "instinct." (The motive is a desire for a good consciously foreseen. It is a rational anticipation based on experience and memory. The instinct is a blind impulse from behind, an inherited force with no conscious foresight of the end of activity. The motive is the incentive of the rational man; the instinct, of the non-rational man.) With the development of psychology, as is well known, the charge was made that the economists had overestimated the amount of rationality and foresight in human nature. Yet some defence is possible of the economists who held that calculated self-interest dominates behaviour, in view of the fact that there developed swift and complex changes in the environment during the Industrial Revolution; and some men made quicker and more successful adaptations to the changes than others. Instinct does not account for change and adjustment, so reason was chosen as a term to explain the behaviour of those who could most quickly and successfully adapt themselves to the new conditions. This deliberate, self-reliant, foresighted judgment is characteristic, according to recent psychologists, of a limited group, the group of economic men, but is not a universal or race characteristic. Perhaps the man who has an analytical intelligence, like Sombart's original capitalist, is a biological sport. At least the earlier classical economists, and still more Marshall, realized the limitation of economic behaviour that was based on rational motives. Practically the whole of the labouring class, and, by implication, nearly everyone else excepting the business executives, the captains of industry, and the managers of the

representative firms, were deficient in calculation and foresight. This characteristic absence of conscious motivation in human conduct was what was emphasized by the psychologists in their reaction against utilitarianism.

The psychology that emphasized the non-rational in human nature took a number of forms. One was Tarde's theory of imitation. Later emphasis was placed on instinct. In McDougall's *Social Psychology*, for example, all the complex aspects of sentiment and character are explained as due to combinations of simple, primitive, instinctive responses. The more recent conflicts between psychologists are between those who emphasize instinct and those who emphasize habit. Among the latter, the instincts, the original nature of man, have shrunk to a few elementary reflexes, such as the food responses, the sex response, the withdrawal response, and the struggle response;¹ and the great bulk of human nature is a matter of habit complexes. These habits by early origin and long continuance may become pre-potent; they may acquire the dominance of instincts.

On this view, human nature has a few fundamental needs. The means by which these needs are satisfied may be legion. And great complexes of activities may be created on the foundation of these elementary needs. Some of these may be merely institutional structures erected on the basis of these needs—as the modern school, church, political party, industrial corporation are institutional creations, upper stories in the mansion of human nature, in which the foundation and the first story is the instincts. Others are seemingly more the results of the efflorescence of original drives, of individual caprice, of surplus energy seeking self-expression in forms that seem remote and almost unrelated to original instinctive drives. Thus artistic and literary activities seem more of an outlet for individual self-expression than an orderly development of the original instinct of reproduction.

The habit psychologists emphasize the plasticity of human

¹ Allport, F. W., *Social Psychology*.

nature. On this view human nature, if caught young, can be moulded into almost any form desired. Professor J. B. Watson holds a faith that if he had complete charge of infants from tenderest age, he could make them into respectable men or criminals; he could turn them out into any standard form desired.¹ However, up to the present, this is a hypothesis rather than an achieved result. On this view of psychology, human nature in the new-born child is like unplaced concrete. Parents, nurses, later teachers, playmates, the church, the press, one's occupation—all these take a hand in pouring the concrete into the conventional moulds. With the passage of years the concrete hardens. It cannot now be moulded into other shapes. And the subject of this process is convinced that he has adopted this form through an act of choice, expressing his own free individual judgment. The evolution from inchoate plasticity to his final shape he holds to be an orderly natural process; and the final form he takes is an expression of the symmetry and order of nature.

The English classical economists, like the modern naïve product of his institutional environment, did not distinguish the natural or the biological from the created, the artificial, the institution. The institutional conditions they considered as a part of the order of nature. (Thus classical economics is an example of institutionalism; it was based on specific, historic institutions. These institutions were, for a time, and on the whole, beneficent institutions. The mistake of the classicists was their assumption—or too infrequent denial—that these institutions were a part of a natural order; and that economic processes were based on objective, mechanical laws, and not on man-made organization and arrangements.)

According to this analysis the justifiable classification as natural and artificial is (1) that which is the expression of the biological organism, and (2) that which is the result of an institution or habit pattern not the instinctive product of biological or organic needs. For example, take the well-known Pavlov

¹ *Behaviourism*.

experiment. On the appearance of meat the flow of saliva in the dog's mouth increases. That is a natural phenomenon: there is a biological, physiological connection between the meat as stimulus and the flow of digestive fluid as response. Later on a bell is rung every time the meat is offered. Then, eventually, if the bell is rung when there is no meat at hand, the saliva in the dog's mouth flows as before. There is no natural connection between the ringing of the bell and the flow of saliva, yet the saliva flows just the same. This method is the method of the conditioned reflex. By means of it behaviour can be controlled, group habits may be inculcated, just as if they were based on real needs and natural reactions. In a sense it may be natural to react to the object used by the experimenter in individual or social control who uses the technique of the conditioned response. But such reaction satisfies no natural or biological need. It may be a desirable mode of expressing surplus energy, of enjoying individual creative or capricious activity, or of giving some creative leader a chance to express his personality. But such activity is not instinctive, biological, and, in that sense, natural.

Closely related to this technique of the conditioned response is the concept of fictions. Fictions are concepts which have no biological reality, but which are made to appear real and are made operative and dynamic in actual life through the mechanism of the conditioned response. Nation, race, class, ownership, social and economic laws, which are perhaps biologically unreal, are, then, examples of fictions. They do not promote organic welfare, as the meat does for the dog. But they have the same stimulating effect on behaviour as the ring of the bell. Men fight, die, half starve, abuse, or sacrifice their children, and make themselves virtual slaves to others by the habit-dominating force of these non-natural symbols validated and valued by means of the conditioned reflex.

This modern habit psychology is the basis for a new attitude to social problems. It opens a wide range for choices and possibilities. In the instinct psychology the range of possible

institutions was narrow. Eventually a non-natural institution, one not based on an original instinct, would break down, because an instinct demanded expression. Repression of it would destroy the subject. But according to habit psychology, many types of institutions may be erected on the same foundations of human nature. The creative artists in life, the super-salesmen of fictions in the spiritual world—the poets, politicians, militarists, ecclesiastics, and educators, can play many strange harmonies on the few chords of instinct, and not be held to an accounting; for the music of the composer is thought to be the harmony of the universe.

Before proceeding to consider in more detail the relation of the psychology of institutions to economic theory, another point in psychology may be considered. (The specific institution does not cover the whole range of human wants. Each institution serves or appeals to or represents a part of human nature.) The complete personality of the individual, the whole round of his personal relationships is often represented metaphorically by a series of concentric circles, with the individual at the centre, himself the product of these relationships; after the individual comes the family circle; after the family the educational circle; after that the wider social circle; then the occupational circle; also the political circle; and finally the ideational or the spiritual, the circle of ultimate values. Each circle may also metaphorically stand for an institution, such as the school, the church, the state, the economic institution. This latter, (the economic institution, would probably be subdivided into a variety of different institutions having in common the fact that they are all based on the same human need; and connected, besides, in modern times by common relationship to the money market.) The point of this illustration is that institutions express or serve only parts of human nature. Professor Allport presents the same idea by representing the whole personality, the complete biological organism, as a circle, and the specific interests as segments of the circle. Thus the individual has an economic segment, a social segment, a political segment, an aesthetic

segment, a scientific segment, a religious segment, etc. Men organize themselves into groups to promote these specific interests. A man may belong to a corporation, a church, a political party, an orchestra, and a golf club. An institution is a set of group habits centring about some specific want or interest. It does not concern the whole personality. It has to do only with the common interest or common segment of many personalities. What Allport calls the institutional fallacy is the idea that this institution, this abstraction from the whole personality of many individuals, has the characteristics of a complete organism, a complete psychic entity. This treatment of a part as the whole, or the abstracted segments of many personalities as a complete and dominant personality, Allport calls the institutional fallacy. This is akin to the metaphysical state of the German political theorists and the social organism of some of the sociologists. It is really a fiction, a means by which some aggressive individuals may dominate others. It thus becomes an instrument of the conditioned response. Or, in other words, the institution is artificial, non-biological, non-natural. Thus widespread habits and customs based on specific interests or personality segments may restrict and limit the development of unique and complete personalities. They may lead to repression and starving rather than freedom and self-expression. The same fear of institutions is characteristic of J. A. Hobson. "Everywhere and always in history the free life and mind of the individual have been so crushed, enslaved, and moulded by tyrannies of State, Church, master class or parental authority, with customs, taboos, laws, and sanctions of their making, as to make suspect among free minds any other values, or loyalties, than those of conscious personal choice."¹ However, as was indicated above in the discussion of the conditioned reflex, there is ground for critical suspicion of the purity of "conscious personal choice."

To elaborate Allport's distinction between the natural, the biological, the complete unique personality, on the one hand,

¹ Hobson, J. A., *Economics and Ethics*, p. 29.

and the institutional, the abstraction and organization of partial human interests or personality segments on the other. In respect to any kind of human interest, intensity, efficiency, power, individuals will vary. If their behaviour is graphed, after the method of the statisticians, the result will be a bell-shaped curve. This is true of height, weight, strength, of all human characteristics subject to anthropometrics. It is true of scholarship, and presumably of moral qualities, such as courage, industriousness, and goodwill. The test whether people are acting naturally, then, is whether the graphs of the behaviour measured falls into a bell-shaped curve. Institutionalized action, on the contrary, tends to greater uniformity. If graphed, it will approximate the J-shaped curve. This is illustrated in a research now being made at Syracuse University by Mr. Milton Dickens, a student of Professor Allport. The purpose is to determine the effect of the traffic laws on the behaviour of motorists. The actions of motorists are observed at intersecting streets where there is a stop-sign and where there is no stop-sign. The actions are classified under four heads: (1) No slackening of speed; (2) moderate slackening; (3) slow speed; (4) complete stop. At the crossings where there are no stop signs, where the virtue of caution is given "natural" expression, the behaviour when graphed approximates the bell-shaped curve. At the crossings where there is a stop-sign, the great majority of motorists come to a full stop, a smaller number proceed at slow speed, a few at moderate slackening, and a very few with no slackening of speed. When graphed, the behaviour at stop-sign crossings approximates the J-shaped curve. In other words, if caution is a virtue, the institution of the stop-sign enables many people to assume a virtue if they have it not. And this leads by an easy transition to the question of the relation of institutions to social reform, and of the classification of institutional economics as liberal or conservative. The attitude of Professor Allport, as suggested above, is hostile to institutions. He is a sort of modern Rousseau whose ideal is the untrammelled expression and realization of unique

personality, and whose programme for social reform, therefore, is to remove the institutions that prevent behaviour from operating according to the rule of chance, or of biological variation.

But most economists who have been somewhat vaguely characterized as institutionalists are in favour of social reform by means of institutions.

What specifically is meant by "social reform"? All social problems are problems of valuation. And this valuation may be classified into two types, the democratic and the aristocratic. The aristocratic valuation emphasizes distinction and exclusion. It judges from the standpoint of real or fancied superiority. It assumes excellence of birth, wealth, strength, skill, or knowledge. The aristocratic attitude finds value in those who are superior by whatever standard chosen; and relegates the mass of mediocre or inferior men to the rank of servants or followers. The man of distinction is the true end of the economic process, the rest are merely means. The democratic valuation, on the other hand, recognizes the force of numbers. And it questions in many cases the claim to superiority asserted by the upper class. Superiority may be due to luck; and if it is the result of greater power of body, intellect, or will, it is, then, merely an illustration of the law of biological variation. In other words, it is chance carried back another generation. The mediocre man has perhaps as much chance of being a father of a genius as the man of wealth or distinction. Thus because of his belief in the biological potentiality and untrained potential capacity in that mass of the people the democratic social reforms evaluate the common man, and seek a social and economic order that will give him income, security, and his chance at education, adventure, self-expression, and the other ultimate goods of life. Social reform is aggressive democracy.

What is the relation of institutional economics to social reform? Most men who call themselves institutionalists are in sympathy with the democratic, reform ideal. For one reason this attitude may be due to the obvious incongruity of classical economics

and mass human welfare (The orthodox economics, whatever its origin, has come to be mainly a justification of wealth and power, an apology for privilege, a rationalization for a financial aristocracy. Hence the democrat or the reformer reacts against traditional orthodoxy. His attitude toward the traditional economic laws is one of irritation, since they merely seem to demonstrate that nothing can be done. He notes that in the richest country of the world probably a majority of the people live upon a standard that is below the efficiency line of health. And he observes that the class of men who most consistently preach that it is futile and even disastrous to act contrary to natural economic laws are bankers, manufacturers, politicians, and newspaper owners, who spend most of their time manipulating human situations. Then, if the newer sociologists, like Dr. Har,¹ come forward with the thesis that there are no objective, immutable laws of social life, such as can be formulated by mathematics and can exist independently of human plan and arrangement, the democrat and humanitarian takes heart.)

The new psychology underlying institutionalism is thus consistent with social reform. The emphasis on habit in place of instinct, and the conditioned reflex as a means of changing and readjusting habits, gives the psychological grounds for constructive change. And biology as well as psychology offers encouragement for the meliorist. The doctrine of evolution makes change appear the normal, instead of the static equilibrium of the eighteenth century and the classical economists. And, finally, the law of averages, the law of biological variations, gives an idealistic basis for democracy, makes possible a long-run reconciliation of democracy and distinction. All these make possible an adjustment between economics and ethics in the general field of the institutional approach.

However, the writer of this study does not hold that there is any necessary connection between institutional economics and social reform. (Institutional economics is the theory that

¹ Har, K. D., *Social Laws*.

economic processes are determined by economic institutions rather than by economic laws. And institutions can be aristocratic as well as democratic; or, from the point of view of the democratic valuation, they may be good or bad.) Thus one of the most brilliant of the exemplars of the institutional method. Thorstein Veblen, whose special field was the origin and development of social and economic institutions, traced the growth of the institution of the leisure class and the institution of business enterprise. These institutions and two others, ecclesiasticism and militarism, represent the chief subjects of his brilliant exposition. And the impression he gives of all is that they are undemocratic and unethical. It is Veblen's democratic¹ and ethical attitude which envelops his historic and scientific exposition, and which makes his work literary satire as well as social science. Other institutionalists, like Beatrice and Sidney Webb,² are in ethical sympathy with the institution they describe, the institution of trade unionism. Here is an example of an ethical institution, as judged by the democratic valuation. And Professors Walton Hamilton and Stacy May describe a whole series of institutional patterns or arrangements by means of which wages may be made higher than they are.³ Thus (economists in describing economic institutions can approve or condemn them according to an ethical valuation.) The ethical optimism of the new institutionalism is justifiable by the pragmatic psychology underlying it, since the undemocratic and unethical institution can be discarded by the concerted action of human wills, and the plastic and unformed rising generation may be conditioned in the way of the democratic and ethical institutions.

The ethical or non-ethical nature of institutions may be determined by an understanding of the sources of institutions. This subject, of course, is a vast new field for investigation and research. It is probable that some institutions are deter-

¹ Veblen, T., *The Theory of the Leisure Class* (London: George Allen & Unwin Ltd.) and *The Theory of Business Enterprise*.

² Webb, B. and S., *Industrial Democracy*.

³ Hamilton, W., and Stacy May, *The Control of Wages*.

mined by geographic conditions. (A new source of industrial power may create the conditions for a whole series of new social and industrial arrangements, and thus stimulate the creative activity of men of initiative and leadership, just as the discovery of coal made possible the invention of the steam engine and the whole gamut of new institutions that arose during the Industrial Revolution, and as the discovery of petroleum and the inventions of the internal combustion engine opened the way for new arrangements in technology, industrial organization, transportation, and social life.¹ Whenever there are dynamic conditions, there is the possibility of new institutions. Hence new natural resources or sources of power, new scientific discoveries, changes in the nature of wants or increases in population—changes which upset the relation or proportion of economic or social factors and which bring about the need for readjustment in a new combination and proportion—these are favourable conditions for the rise of new arrangements, new group habits or institutions. For the most part these new arrangements develop by a limited-view, trial-and-error process. They are not the product of conscious, systematic planning. They are probably more often the by-product of the activities of men or groups of men with healthy appetites and robust self-assertion in quest of food, sex, and social prestige. Institutions may originate or at least be retained long after they fail to function for the welfare of the mass of the people by virtue of what is called propaganda.) This is the chief mechanism for the control of so-called public opinion, which is a sort of euphemism for the rigidity of opinion habits in the mass of adult population. If new institutions are created as the result of geographic or technological conditions there is an objective, non-ethical, deterministic basis for the institution. Other institutions or widespread group habits may be due to the conditioning of one's occupation. Thus Veblen distinguishes the institution of industry from that of business on account of the technological in contrast to the pecuniary

¹ Ogburn, W. F., *Social Change*.

nature of the occupation, and he relates these fundamental occupational institutions with all kinds of spiritual traits which flow from them. An occupation is thus a conditioning force for many physical and mental habits. More recent social scientists of the type of J. B. Watson emphasize the earlier conditioning, weight more heavily the conditioning that is made in the early years. Perhaps one of the chief forces that determines the bent of habituation is the most important or the most often recurring factor in one's environment. Hence the importance of geographic conditions and of occupation. A dominant personality may be the creator of an institution as in the great man philosophy of Emerson and Carlyle summarized in the remark of Emerson that "an institution is the lengthened shadow of a man." Another view of the origin of institutions is that they are evidence of successful group influence. The dominance of social classes is thus reflected in social and economic institutions. Institutions may thus reflect the attitudes and valuations of the dominant class. The institution, then, is a reflection of and a means to the perpetuation of the class interest. Among such institutions are property and inheritance. Their form tends to determine a democratic or aristocratic distribution of wealth.

To present the argument summarily, instincts are the original elements of human nature. They determine the ends that men commonly pursue. The ends of life are set not by rational calculation but by instinctive tendencies of a stable and persistent sort. Intelligence functions by way of providing ways and means for accomplishing these ends. Whether all of the more complex human activity is merely harmonies on the strings of instinct or whether there is a biological surplus for free, creative individual activity will be left to those best qualified to judge. The apparatus of ways and means is a legacy of habits from the past. These widespread habits of thought and action are institutions. They find objectification in material objects, symbols, and recorded technique. Hence they come to have a prescriptive and impelling force, and condition the rising

generation of individuals. In the language of the recent psychology, institutions are self-perpetuating by means of the mechanism of the conditioned reflex.

The psychology of institutions is thus a basis for an optimistic, social reform attitude towards industry. But the psychology of institutions does not itself imply social reform. Social reform implies valuation, and that is a matter of ethics, of welfare economics. (Thus institutionalism is not a theory of economics or a justification of the present economic order or a programme of social-economic reform. It is an understanding of the mechanism of how social phenomena came to be, an explanation of how we got that way. In other words, it is the social psychology explanation of how human arrangements originate and develop, and how they may be modified or superseded.) Institutionalism is not a method of valuation; it is a tool, a mechanism of social process. Valuation takes one into the field of welfare economics or of collectivism, if one prefers the democratic idea; or into classicism, marginalism, or the newer capitalism, if he prefers the aristocratic ideal. Thus back of every social problem is a chain of valuations; and every work of social science, if not mere description of mechanism, is an elaborate process of begging the question.)

Institutional mechanism may be an explanation for either an aristocratic or a democratic arrangement; institutions, from the democratic view-point, may be either good or bad. Thus institutions may be predominantly aristocratic in nature; they may perpetuate inequality in the distribution of wealth and income. Feudalism, the monarchy, slavery, the modern industrial corporation, the holding company, the present Republican Party are examples. On the other hand, the democracy of the early New England town, the public monopoly, like the United States Post Office and the Ontario Hydro, the public land policy of the United States, are examples of democratic institutions. In a broad sense, institutions may be classified as good or bad, better or worse, from the point of view of ultimate values, of ethics and aesthetics. A good institution

is a good group habit, and a bad institution a bad group habit. Thus the merit system in government might be called a good group habit; and the spoils system, the reverse. The same institution, according to the principle of historic relativity, might be good or better at one time, and bad or worse at another. Thus the absolute monarchy of the Tudors may have been a good habit; the monarchy of the Bourbons, the Stuarts, the Hanoverians, and the Hohenzollerns, a bad habit. German municipal government before the war might be termed a good habit; American municipal government in Boston, New York, and Chicago, a bad habit. Unrestricted private property and inheritance, free competition and *laissez-faire* may have been good institutions during the break-up of feudalism, but possibly not in the age of Doheny, Fall, and Sinclair. Of course, one could make a series of interesting contrasts of institutions from the ethical and democratic point of view—mayor *v.* city manager, slavery *v.* peasant proprietorship, spoils system *v.* merit system, capitalism *v.* socialism, war *v.* the League of Nations, etc.—but what is needed is intensive investigation into the sources and evolution of institutions and their relation to social welfare, like Veblen's studies of the leisure class and business enterprise. In fact, the institution of business enterprise, the institution of private property, the institution of the price system, and the institution of machine technique have been described as the four major inclusive institutions of the modern economic order.¹ It is probably the connections and interrelations of these institutions that give the peculiar complexion to modern culture. The machine technology and the pecuniary system would probably be a part of an economic collectivism—but these are subjects for other research.

Institutional economics is the type of economics which holds that economic processes are regulated by economic institutions rather than by economic laws. Different institutions represent different patterns of conjoint behaviour, different subjects for ethical or aesthetic choice. Social laws are merely

¹ Thorp, Willard, *Economic Institutions*.

descriptions of social institutions. Economic laws are merely descriptions of economic institutions. And these institutions exist by virtue of human choice or human sufferance, by conscious planning or as an unforeseen by-product of class conflict and social dynamics, by propaganda and inertia, by democratic co-operation, or by science and popular acquiescence. An economic law is merely a description of the mechanism of an economic institution. A description of the operation of our institution of banking and credit is one illustration of an economic law, if one is to keep the old term and give it the new meaning. Gresham's Law, for example, is a description of the mechanics by means of which different kinds of media of exchange are kept at a parity. If money consists entirely of specie, and specie is of gold and silver, Gresham's Law explains how the market price of the two metals is kept at approximately the mint price. But if the government sanctioned the use of only one form of money, if there were strict monometallism and no subsidiary coinage, Gresham's Law would not function in this situation because there would be no bimetallic or multi-metallic system, no institutional field in which it could operate. Hence society, as in the "crime of '73," can abrogate an economic "law" by abolishing the institutional conditions under which it operates, or, in plainer terms, by destroying the pattern of human devices of which it is a description.

In order to make this subject a little less abstract and general, some space will be given to a comparison and contrast of two phases of certain economic institutions so as to suggest the different relations to welfare, ethical, and democratic criteria. These institutions to be compared are, first, the individual proprietorship as a form of business organization, and the corporation; and second, the private corporation or group of corporations organized under a holding company, on the one hand, and the publicly owned and operated industry on the other.

First the individual proprietorship and the corporation. In

the individual proprietorship one man owns the entire enterprise, and assumes all responsibility and all financial risk. Such an enterprise can start or stop with little formality. The owner furnishes the capital, he purchases the materials, hires the employees, determines all the policies. And after expenses are paid he owns all the profits or is liable for all the loss. Such an enterprise is relatively short-lived, because it terminates with the death or retirement of the owner. It is not characteristically a large-size enterprise, because of the short duration and the limited capital or credit. It does not attract capital, because there is a limitation in the amount of money which a single person can borrow, and because the individual proprietor is liable in case of failure not only for the amount he has put into the business but for the full amount of his assets. Perhaps from the point of view of the judgment of an institution by the standard of the democratic valuation, the significant thing about the individual proprietorship is that it is based financially on personal savings or personal credit, and the capital of the enterprise is in the form of debt which is paid off at the commercial rate of interest.

In contrast to this type of industrial institution is the corporation. It is instituted upon the organization of a number of individuals. Legally the corporation is an individual, acting in the eyes of the law as if it were a person. This, however, is probably a legal fiction. In contrast to the individual proprietorship the corporation is permanent or for a long time. The industrial corporation is suitable for operation on a large scale. It employs many men. It specializes its labour and management. It uses the most complicated and specialized machines, and it can afford to employ a corps of scientists and experimenters. The reason for this is its ability to secure a large amount of capital, which is due in part to limited liability and in part to the efficiency of large-scale operations. From the point of view of the democratic valuation the chief distinction between the individual proprietorship and the corporation is the separation of ownership from management and the differ-

ence in the financial structure. In the individual proprietorship the capital of the enterprise is furnished by the owner or borrowed from the bank on the owner's personal credit and paid for at the commercial rate of interest. Typically, the corporation is financed by bonds, preferred stock, and common stock. The characteristic financing of the corporation, however, is either by bonds or common stock. Preferred stock is an intermediate form, but quantitatively is generally of minor importance. The bonds represent debt which is paid for at the market rate of interest, as is the capital employed in the individual proprietorship. The common stock is the pivotal factor in corporation management and policy. The common-stock holders are the residual claimants to all profits earned by the corporation. As a rule common stock alone carries voting power in the management of the corporation; or by a more recent device the common stock is divided into two classes, for example Class A and Class B, and voting power is given to the holders of only one class. Normally, each share of common stock has one vote. In this way a few large shareholders can control the corporation. The more widely the stock of an industrial corporation is owned, if a great many people over a wide area own a few shares of common stock, the easier it is for one man who owns a large block of stock, or for a few big stock-holders to control the corporation. Thus the corporation is an institution which may create fabulous wealth for an enterprising promoter, for the promoter pays himself normally in common stock. If the enterprise is successful, whether due to advertising or efficient management or to widespread social demand, as in the case of the automobile industry at the end of the World War, large dividends will be payable to the owners of common stock. If the industry is financed one-half by 6 per cent bonds, and one-half by the sale of common stocks, and there is a profit of 6 per cent on the total capital, the common stock will have a market value of approximately one hundred, and can pay a dividend of 6 per cent. If profits should double because of increased efficiency in cost reduction by the organi-

zation, or increased social demand, as in the 1920's in the automobile industry, the profit on the common stock will be three times as great, and the market value of the common stock will be approximately three hundred. A more extreme illustration of this is the history of profits during this period in the General Motors Company, where an investment of twenty-five thousand dollars made one after a few years a millionaire or brought a return of forty dollars to one dollar invested in the business. Thus the modern industrial corporation makes great wealth for the man who inherits wealth and enjoys the social connections that lead to profitable investment. In many cases the recipients of the largest profits have no active connection with the business from which they draw their incomes. According to the National Bureau of Economic Research, of the incomes in excess of two million dollars in the year 1922, 96 per cent was from property income, and 4 per cent from personal earnings. In 1922 the same research organization estimated that in the case of individual incomes of one million dollars or over, 46·99 per cent was in the form of dividends, and 32·60 per cent was in the form of profits from the sale of capital assets, or, in other words, from the appreciation of common stocks.¹ Since the absentee owner of common stocks is in many cases the recipient of great wealth, he is the beneficiary of industrial progress or industrial dynamics. Yet he does not create the dynamic conditions by which he profits. That is done by the explorers of new materials and power, the experimenters, the scientists and engineers, the ablest, in many cases, of the students turned out by our state-supported or mass-supported educational institutions. The owner of common stocks is in many cases an absentee, knowing nothing of the enterprise that he owns, and being a beneficiary of industrial progress through the privilege conferred by the institution of inheritance. Thus from the view-point of the welfare analysis the corporation as an institution may be contrasted with the individual proprietorship. Through the

¹ Cf. Tugwell, *American Economic Life*, chapter v.

large-scale operations, the use of machinery, the division of labour and management, and the facilitation of invention and research it increases production, and thus promotes the general welfare in so far as that is done through a greater social dividend. On the other hand, it increases the inequality in the distribution of wealth. It decreases poverty but it decreases democracy. As an institution which developed in the period of the most rapid growth of inventions in history, it has a place of great importance. Through the amassing of great wealth in a few hands it has facilitated the accumulation of investment funds, of surplus economic power, and has thus probably stimulated inventions and facilitated their application of industrial processes. On the other hand, the industrial corporation with its technical efficiency and its possibility of financial manipulation, its amassing of surplus wealth in the hands of a few, has tended to swell the capital, the economic power, available for the production of producers' goods; but, at the same time, it has left a smaller ratio of the total purchasing power in the hands of the recipients of wages and agricultural earnings. Hence production of capital goods has outstripped purchase of consumers' goods in the retail markets, where there has been a slackening in the rate or volume of new inventions which would employ labour in making new plants and machines. Thus with a quickening of the rate of invention the privately owned industrial corporation has been an efficient instrument for the increase in production of economic goods, and so a "good" industrial habit, from the ethical or welfare point of view. But with a slackening of the rate of increase in the volume of invention, or a greater relative increase in the functioning of the institutions that facilitate the supply of economic power to makers of productive instruments, the private corporation, in the hands of men who are eager for profit and who, in many cases, are without social vision, has acquired, as a characteristic group habit, the habit of closing down and producing unemployment, industrial depression, and all of the accompanying social evils.

Now for an example of a different institution, a contrasting pattern of conjoint behaviour, let us consider the publicly owned and operated industry, the government monopoly. This is an institution especially liable to create confusion and difference of opinion, because the same term applies to two widely variant habit patterns. The crucial distinction between the two is found in the type of government administrative board. It may be composed of practical politicians, self-appointed and vicariously self-elected, as in the case of Tammany and most representative Democratic or Republican organizations. The other habit pattern—public monopoly—is that typically illustrated by the administration of a state university or by the Ontario Hydro Electric Commission. The distinction between these two types is fundamentally that between the merit system and the spoils system. In the politician type of public monopoly the merit system applies to the lower grade of officials, but those with authority and high salaries are elected by the passive and suggestible electorate or are politically appointed. The politicians, as a rule, are not in politics for their health; or, if they are, their health is causally connected with a generous pecuniary income. Hence the intimate and corrupt relation of practical politics and big business.

The other type of public monopoly, which is illustrated administratively by the State University or by the City Manager government that keeps out of politics, is characterized by the application of the merit system to all of the personnel. Men are chosen because of their fitness for the positions—as far as that can be ascertained: by education of a desired kind; by grades, publications, professional experience; by age and health; by personality and character.

This type of public monopoly, of which there are in the world many unobtrusive examples, tends to follow a certain structure or pattern of behaviour. One phase of this is that its ownership is inclusive or embraces all of the citizens. This is in contrast to the modern privately owned industrial corporation, of which it has been estimated that in 1926, 60 per cent of the cash divi-

dends were paid out to about 2 per cent of the people.¹ Less than 1 per cent received 53 per cent of the dividends in 1926.² Perhaps another way of saying the same thing is that under the type of public monopoly that employs the merit system the specious fiction of ownership has been exorcised. People use and enjoy the service of the corporation in proportion to their need or their capacity for use, just as we use the facilities of the United States Post Office in proportion to our need or desire to communicate, without a thought as to who may own the enterprise. The fiction of ownership has been dissipated before the biological reality of personal use.

This type of institution, the good or merit system public monopoly, tends to conform to the ethical or welfare standard of the democratic valuation. The policy is one of use or service to the total public rather than profit to a few owners. Thus the tests of success of the private financial corporation, profits, or excess of revenue over cost, is irrelevant in this case. As costs are reduced through improvements in transportation, volume of business, or other changes, rates are reduced, as in the reduction of charges for carrying letters in the United States from five to two cents. A financial deficit even may be compatible with great efficiency; for, if the facilitation of information and communication is considered of great social importance, so that a low rate is highly desirable, it may be good policy to charge less than the cost of the service and make up the deficit from general taxes.

This democratic, welfare pattern of public industry is exemplified in the financial structure. If the publicly owned and operated industry is designed to be financially self-supporting, as in the case of the Ontario Hydro,³ the money to build the plant is secured typically from the sale of bonds. All of the investors are in the same financial relation. There is every

¹ Field, R. S., *New Uses for Capital*, p. 15.

² *Ibid.*, p. 53.

³ Peck, H. W., "An Inductive Study of Publicly Owned and Operated versus Privately Owned but Regulated Utilities," *Papers and Proceedings of the Forty-first Annual Meeting of the American Economic Association*, March 1929.

inducement to pay off the principal as well as interest on the bonds, after which the interest charges will cease to be a cost factor against the charges made to consumers. As there are no common stocks, the enterprise does not lend itself to promotion, to financial manipulation, to the devices of holding company financing, which burden the consumer with high rates, or transfer the benefits due to inventions and improvements into promoters' and bankers' profits, lawyers' fees, and the gains of organizers and reorganizers, instead of rate reductions to the mass of the consumers. In fact, the whole institution of distribution under the pattern of the public monopoly that employs the merit system is of the democratic type. There are no profits, in the conventional sense of the term. Virtual profits, or difference between income and cost, are used either (1) to provide public revenue and thus reduce general taxes, or (2) to pay off the bonds, and thus make possible lower rates to consumers in the future, or (3) to lower the rates at present. In the third case, which is characteristic of many publicly owned utilities, profits are distributed to everyone, or to all users of the service, in proportion to their use, which probably roughly measures their need or their capacity for utilization. If we translate this widespread social betterment into financial terms, it may clarify this idea of the ethical, democratic nature of public enterprise. The rates to domestic consumers of electricity in New York in 1925 have been shown to be about three times as high as those in Ontario under the dispensation of the Ontario Hydro:¹ 100 kW hours per month in New York at 4.5 cents per kW hour, equals per year \$54; the same amount in Ontario at 1.5 cents per kW hour equals \$18. This is the same as if every head of a household who uses 100 kW hours of electricity in the home received an annual dividend of \$36, or 5 per cent on an investment of \$720. And this is only one of the industries that minister to the needs of the public. If all families thus received dividends in the form of cost reductions in proportion to value in use, there would

¹ Peck, H. W., p. 311, note.

be a wide distribution of the real benefits of industrial improvements, and a widespread development of a sense of community.

Yet it will be contended that private ownership promotes enterprise and efficiency so that great profits of a few men, as inducements to industrial improvements, are justified from the point of view of the mass of people by the faster tempo of improvement and the consequent greater quantity or better quality to goods available for the mass of consumers. It is contended that the pattern of public ownership may be suitable to old industries and static conditions, but not to dynamic and growing industries. This topic the author can approach from the vantage-point of an inductive analysis, and of the co-operation of a group of able specialists.¹

In view of the facts assembled in this research it is now possible to make at least a provisional contrast of public industry as a type of group habit pattern with private industry as organized in the form of corporations and combinations of corporations.² Private corporations tend to create great profits for a few promoters, bankers, lawyers, advertisers, or people with inherited wealth. In contrast, public industry tends to distribute wealth or income to a great many in proportion to need or to personal use. Public industry thus conforms to the principle of equality of opportunity. The institution of inheritance is practically abolished to the extent of consumption of the product of the public industry, for the man of inherited wealth does not have a greater inherited capacity for the use of electric power or for the services of the Post Office than any other man. Private corporations promote financial aristocracy by a series of financial complications and fictions.³ On the other hand, the merit-system monopoly in the public economy evaluates its property by the market price of the aggregate of the physical items. It secures the money, where the industry is to be self-supporting, from the sale of bonds,

¹ Peck, H. W., p. 311, note.

² Cf. Peck, H. W., "Some Theoretical Aspects of the Public Utility Controversy," *International Journal of Ethics*, April 1930.

³ Veblen, T., *The Theory of Business Enterprise*, chapter v.

pays off the bonds as rapidly as possible, obviates unnecessary costs, and distributes the advantages of cost-reducing conditions to all the consumers of the service. The corporation or combination of corporations, on the other hand, aims at immediate profits. Hence it avoids immediate repayment of debt and distributes large dividends to stock-holders. These dividends become capitalized, so that the shares of the common stock greatly appreciate in value. This great appreciation in the common stock is by a financial fiction objectified into so-called intangible assets. These intangible assets are nothing more than an estimate of the profit-making possibility due to the great public demand for the services or the political influence of the corporation, which makes the great mass of the consumers helpless under the demands of the corporation for profits. In contrast to this, public industry aims at the rapid payment of debt, the elimination of unnecessary expense, and the wide social distribution of benefits. In addition we found in our research in the subject of electric utilities that public enterprise shows greater initiative in the making of experiments which have the general welfare in view, for such experiments as drastic price reduction were almost entirely confined to publicly owned plants. This is probably not due to any difference in the original human nature of the men at the head of the private or public enterprises, but to the habit-forming or conditioning power of the institutions themselves. The structure of the public enterprise makes possible experiments in price reduction, because it is insured against ultimate failure by the public power of taxation; while a too radical reduction of prices in the case of private enterprise might lead to deficit or bankruptcy.

From these two comparisons of sets of institutions, all of which are framed to promote the same general human end, that is, they are all industrial institutions, we may perceive the great significance of a study of institutional structure. These are but a few of great aggregates of institutions, or subsidiary institutions, which make up our economic-social

order. Property is an institution. The sanctity of property is only a habit of mind. The inheritance of wealth is a group habit, and probably a bad habit. (Institutional economics attempts to explain economic conditions as the product of a conglomeration of good and bad group habits, any one of which can be broken or changed. In place of explaining the distribution of wealth as due to the law of wages, the law of rent, the law of interest, and the law of profits, institutional economics explains the present distribution as due to the institutions of wages, rent, interest, and profits.

The wage system is not universal. It is not the necessary product of biological needs. It did not exist under slavery, the feudal system, the manorial system, and the frontier economy. As Hamilton and May have demonstrated, there is no such thing as a natural rate of wages. Logically such a rate might be deduced if one could assume that all other distributive shares were fixed; but that is far from the facts. (To say that wages are determined by the play of demand and supply, that is, by the operation of economic laws, is true as far as it goes. But back of demand and supply are many specific factors, some of which are operated and manipulated by human beings, so that the working of supply and demand is nothing more than the final weighing, the summing-up, of many individual choices and institutional arrangements.) To say that a government which passes child labour legislation so that children are not allowed to labour under the age of sixteen is interfering with economic laws; while an industrial corporation which decides to spend a million dollars in an intensive advertising campaign is assumed to be acting in conformity with economic laws—this is patently absurd. The government, in raising the age limit, decreases the supply of labour. The corporation, in putting on the advertising campaign, increases the demand for its product. (One agency changes one factor behind supply, the other agency changes one factor behind demand. In both cases institutional arrangements are at work modifying the forces of supply and demand. The law of supply

and demand as popularly understood is thus a more superficial view of the same process to which the institutional analysis is the more profound approach.) For what ever should be the final solution of the labour problem, it would appear that the orthodox traditional approach had scarcely made a beginning of analysis. The wages fund, the iron law of wages, are historic rationalizations. And the theory of wages as the equivalent of the productivity of labour, or the discounted marginal productivity of labour, seems hardly preferable. The present institution, or periodic institution, of unemployment it is hard to believe is a part of the natural order. It is an institution, a bad group habit, which may be eradicated if necessary by mechanical means. Poor relief and the dole are also institutions or group habits. The undesirability of the dole is something that well-to-do taxpayers will not allow us to forget. It is hard, however, for one to realize that a poor man is demoralized by receiving a few hundred dollars without labouring, whereas another may inherit millions, invest them in the common stock of industrial corporations, and increase his wealth two-, four-, and eight-fold without effort, without a knowledge of the source of his increasing wealth, and presumably with no corresponding lesion of self-respect or moral excellence.

(The law of rent the institutional economist would translate into the institution of rent. Richard Jones showed that rent in England, the institutional situation from which the Ricardian law of rent was deduced, was due to the peculiar situation in which three classes received shares of the produce of land. The landlord owned the land. The agricultural labourer worked the land. And the capitalist-farmer furnished the stock and equipment and supervised the labour. This class division, plus the limitation of the better grades of land, accounted for the Ricardian law of rent. The Ricardian law of rent, then, was merely a description of an English agrarian institution. The more widely spread institution of peasant rents, as described by Richard Jones, was an institution of an entirely different sort.) None of the Ricardian generalizations applied to a different

form of agrarian institution as found in the independent land ownership by the American farmer and in the disposition of public lands in the United States. Here also the Ricardian analysis does not apply or did not at least in the beginning. Under the public land policy in the United States the typical arrangement is somewhat as follows. Land was given to the settlers, or practically given. There was land that according to the Ricardian analysis would be classified as first-, second-, and third-grade land. Instead of the first-grade land being all settled before there was resort to the second- or third-grade land, the exigencies of settlement caused settlers to take up land in a series, so that farms of different quality were settled at about the same time. This condition was due to the necessity of group settlement as protection against the Indians, or for maintaining group contact and co-operation. All these types of land utilization result in more or less economic equality. Under the institution described by the Ricardian law the people who were fortunate enough by chance or conquest or inheritance to get possession of some of the first-grade lands received differential gains. In the institution of peasant rents there is no marginal land. All the peasants pay tribute or rent to their prince for the right to retain their holdings. This rent or tribute is determined by the severity or leniency of the agreement between the prince and the peasant. Here again probably the more fortunate ones, who were located on the better lands, had to pay only a smaller portion of the gross produce to the prince. And in the United States, where the lands were settled in a series, the fortunate possessor of the better lands and their descendants could make a larger income from their property. With the passage of time, and the maintenance of private property and inheritance, the agrarian institution in the United States may approach that described by Ricardo. But as a matter of fact the institution of Ricardian rents has been offset in the United States by the development of another and opposed institution: that of governmental activities in the field of immaterial services. The revenue for the support of

these activities has come very largely from taxation, and the most available source of taxes has been real estate. The growth of the probably desirable institution of governmental expenditures combined with an ill-balanced institution of public revenues has prevented the class of rural landowners in the United States from becoming the idle and wealthy recipients of unearned income, like the Ricardian landowners. Here again is a fascinating field for institutional study.

Thus arrangements in land utilization or agrarian institutions, although they may often represent fortuitous and unplanned growths, may also be the subjects of human valuation and choice. The democratic system of land ownership in the United States during the frontier era was a better institution from the ethical point of view than the system of peasant tenure under an autocratic ruler. The produce went to the owner-worker as labour income. And there was no rent of land as a deduction from labour income.

In place of the law of interest the institutional economist substitutes the institution of interest. The payment of interest is a group habit rationalized by the need of accumulating money or purchasing power to secure the goods necessary to support workers who are making capital goods. The payment of interest, then, is assumed to be a prerequisite to savings and industrial improvements. The institutional economist, however, insists that all that is necessary for saving is that the community as a whole should consume less than they produce. The institution of individualistic capitalism has proved very efficient for the accumulation of savings because great incomes have come into the hands of a few; there is a great surplus in this case above that required to satisfy the needs and wants of the large income receivers. The surplus income has almost no present value, and saving becomes automatic.¹ But savings, or restriction of

¹ Field estimates that three or four million people in the United States, less than 10 per cent of the gainfully employed population, save about two-thirds of our total savings. "This small group of persons, consisting principally of independent business men and absolute owners, saves approximately 33 per cent of its income, while 25,000,000 employees save only 6 per cent" (Field, R. S., *New Uses for Capital*, p. 12).

group consumption below group production, could probably be secured by a variety of other institutional arrangements. Under state socialism, as in Soviet Russia, the central economic council could decide to apportion, say, 60, 70, 80, or 90 per cent of the wheat crop of the country for national consumption. The rest they could sell abroad, and with the proceeds buy tractors and other machines. According to John Gray, under this system the Russian government has saved and converted into capital goods a larger percentage of the national income than has ever been saved by any other nation. And this has been done when the national income was relatively small—thirty-six billion dollars for a nation of one hundred and fifty million people, and when, therefore, the abstinence or sacrifice due to the restriction of consumption was correspondingly intense. This national saving was effected without the payment of interest; the government paid the people for abstinence not with interest money but with promises of a greater plenty of consumers' goods in the future, or greater leisure, more security, or, in general, the prospect of greater general welfare in an ethical sense.

But one can find without ranging so far afield examples of other institutional arrangements for group savings that do not require the inducement of interest payments. Our Federal Reserve System is an example. By centralizing the gold supply, and issuing Reserve Bank notes and Federal Reserve notes in exchange for specie, the system increased the supply of loanable funds to perhaps twenty-five times the amount of the gold reserve. If all the gold in a country is in individual banks, which are required to keep a gold reserve of 25 per cent against loans, this system will make possible loans four times the amount of the gold in the system. But if back of the individual banks there is a central bank, and if the individual banks need only 10 per cent reserve in gold, or an account with the central bank, and the central bank issues notes for gold, and retains 40 per cent of gold reserves back of its notes, this system will make possible loans of at least twenty-five times

the amount of gold in the system. And this increase of socially available loan funds, which can be used to finance invention and the building of new machines and industrial plants, has been effected without the device of interest payments.

Another well-known device for securing group savings without the inducement of interest is the issue of fiat money. The savings in this case are secured through the means of a price inflation. The government prints symbols of purchasing power with which it buys goods, such, for example, as are needed by the army; food, clothing, shoes, horses. The increased government demand for these goods, added to the normal private demand, causes demand to exceed supply at the current price level. Total demand becomes equated with supply at a higher price level. The higher price restricts private purchase. And the private purchases forgone represent the supply of goods available to the government. This represents the group abstinence or savings for war purposes. The same savings might be measured in another way, by the difference in price between what the government paid for the goods and the inflated price after the entrance of the government into the market.

Un fact, it might be said that interest payment is not a universal economic law but a phase of the institution of private property and individualism. If savings are secured only because private individuals freely decide to save rather than to spend, then interest may be a necessary inducement for savings. This is so because money or purchasing power has a greater present value to the individual. He may not be alive five years from now, and is still less likely to be ten or twenty years from now. Even if one's sensibility, one's capacity for enjoying expenditure, were as great in the future, which it is not, the probability of personal enjoyment from money is greater if it is spent now. Hence the individual preference for present over future goods. But if we shift from an individual to a group arrangement, the whole preference for present over future goods disappears. Here the decision to save is made not by the indi-

vidual who directly enjoys the expenditure, but by the central economic council or the representative of the community. The government economy is not the short-time economy. To it the future is as sure and as real as the present. If it is estimated that the need twenty years from to-day will be a little greater than the need of to-day, wise statesmanship will restrict present in the interest of future expenditure. The personal desire of John Smith for spending money may blind him to his possible desire for it twenty years from date. But the statesman, the putative merit-system official in the good public monopoly, can take an impersonal view. The desire of John Doe of Massachussetts to spend money now may not be more cogent with him than the probable desire of Richard Roe of Arizona to spend money or enjoy economic goods twenty years from now. That is, if the marginal utility of money to the group were estimated to be a little higher thirty years from now than at present, the wise statesman would arrange for the increase of present savings; for his aim is the maximum social utility, and he exhibits the impersonality of the long-time view. Although the payment of interest may be a factor in public savings, as in the case of financing public industries through the sale of government bonds, yet as shown in the example above ~~interest is not~~ a necessary factor. All of this is in illustration of ~~the contention~~ the institutional economist that there is not an economic law of interest, but that there are a variety of possible institutional arrangements for working out the proper amount of social energy to be apportioned between the making of consumers' goods and producers' goods. In the case of some of these arrangements, interest may be a necessary or desirable factor; in the case of others, not. Whether interest shall be a part of an ideal system is a matter to be decided by the ultimate ethical and welfare evaluation and by the agency or agencies for the valuation and transformation of economic institutions.

Even the classical English economists did not maintain that there was an economic law of profits. Profits, according to their theory, were socially desirable under dynamic conditions;

but economists like Ricardo and J. B. Clark have held that profits would tend to disappear with the approach of static conditions. The view that profits are normal under dynamic conditions, and are a necessary incentive to enterprise and the adoption of inventions and industrial improvements, that they facilitate cost reduction and price reduction, is widely held, even by liberal authors like J. A. Hobson. The author of this study accepted this view until he engaged with several others in a research comparing the publicly owned Ontario Hydro-Electric System with large privately owned electric utilities in New York State. Since the industry which generates, transmits, and distributes electric energy has been highly dynamic, this type of research is of the kind to supplement that of static public industries, like the Post Office, in an effort to evaluate the institution of public ownership. It was discovered, as was pointed out above, that the public industry showed more resource and initiative in making experiments that might work out in the public interest. It is highly questionable whether financial inducements, like profits, have facilitated the work of the inventors and engineers who are responsible for the initiative in the field of technology. Many of the inventors who devise the machines, as well as those who work them, are comparatively poor; for the inventor in many cases is not the kind of man to understand money-making. A prospect of moderate salary increase and of advancement according to merit without unfair discrimination seems to be an adequate "incentive" for men of this kind. But, of course, this is not a matter for personal opinion, but for experiment in the field of industrial relations. It may be that adequate, even moderate salaries, may have all the advantages with none of the disadvantages of large individual profits. Hobson remarks: "A Rockefeller or a Ford, or any other multimillionaire, would do his best if his earning power were reduced to a tithe of what he actually takes."¹ Of this, however, we cannot be sure. How do we know that a man who gets five million dollars a year will work as hard if he gets only

¹ Hobson, J. A., *Economics and Ethics*, p. 254.

five hundred thousand dollars? And how do we know that he would not do his best at five thousand dollars a year, like the professor or physician, if the group would insure him against all financial risk? The answer to these questions cannot be found short of actual experiment. And these experiments should be made not only among men like Ford and Rockefeller and movie stars who have been conditioned in an atmosphere of individualism and large personal incomes, but also among people who have grown up in an atmosphere of co-operation and socialized effort like that of the state university and the salaried experts and technicians of industrial enterprises.

Institutional economics, then, is the economic theory which holds that economic life is determined not by economic laws but by economic institutions. These institutions are made by men or groups of men, and they can be modified and transformed by human forethought and purpose. Hence the prevailing optimism of institutional economists and their interest in social reform. According to the institutionalist, the central task of economics is an objective study of institutions—their origin, their development, their direction, their mechanisms, and their effects upon human welfare. Different phases of economic study deal with different aspects of institutions. Economic history deals with the evolution of economic institutions. Realistic description deals with the mechanism of economic institutions. Economic laws are descriptions of the mechanism of certain economic institutions. Classicism and marginism are studies in the automatic adjustment of certain economic institutions within the enveloping institutions of private property and individualism. Within the institutional approach economic theory is simply a study of standards or measurements, of instruments or tools, for measuring, fashioning, and modifying economic institutions. The most general or inclusive of these standards or instruments is the principle of the normal proportion of factors. Subsidiary aspects of this same principle are increasing, constant and diminishing returns. Also there are diminishing utility, elastic and inelastic demand and

supply, etc. The test of whether economic institutions should be retained or discarded, developed along present trend or modified in a different direction is not, however, to be found in economic history or economic theory or in realistic description of industrial processes, but it is a matter of ultimate, ethical, or aesthetic valuation. In other words, institutional economics implies an integration of the social sciences and of other types of approach for the solution of economic problems. It is part of the conception of institutionalism as here expounded that the economic and industrial order should be made to harmonize with our notions of what is worth while in life. So in the Central Economic Council or the Central Executive Committee of the future there should be artists and philosophers as well as chemists, biologists, physiologists, anthropologists, historians, political scientists, economists, engineers, and psychologists. If this view of institutionalism is correct, there is no disharmony between institutionalism and welfare economics. These two modes of approach are complementary to each other; only one of them lays more emphasis on ends, the ultimate, and the other more on mechanism and means.

CHAPTER XIII

COLLECTIVISM

THE subject of collectivism naturally follows the treatment of institutionalism, because (collectivism is a peculiar institution or set of institutions for solving economic and social problems.) Individualism and collectivism are names for different types of institutions. The individualist believes that individualistic capitalism—private property, inheritance, free competition, regulation only through the mechanism of exchange of a money market—these represent a preferable type of economic-social institution. The socialist or communist believes in habituating men to different patterns of behaviour. Which is the better pattern of group co-operation? On the historic, relativistic theory there can be no absolute answer. It may depend on conditions. Under some circumstances individualism may be a better adjustment, under others, collectivism. Schmoller has formulated the conditions under which the family, the community, or the individual become the economic centres of gravity. The family is dominant under conditions of isolation, independence, and small division of labour, as in frontier conditions in the United States. The individual is dominant when there is a higher division of labour, when there are dynamic, social, and technological conditions, and great undeveloped natural resources. The community is dominant when there is a great division of labour, when production is mainly by the capitalistic and round-about method, and when there is necessary a great deal of transportation and communication over great distances. Another attempt to suggest conditions under which different forms of institutions would be preferable was made in this study in the chapter on Later Classicism. According to this theory, the individualistic order is preferable or at least feasible under conditions of free competition. And free or at least effective competition exists, firstly, when the

trade zone or area of economic interdependence is wider than the political zone or area of governmental control; or secondly, when the area of trade is wider than the area of monopolistic industrial organization. The implications of both these criteria is that collectivism as a desirable form of institutional organization is now a live social issue, because while trade in some commodities has become world-wide, government is still limited by national boundaries. And industrial monopolies, like international trusts and trade agreements, have in some cases become as wide as the world market. The philosophy of socialism has been the antithesis of that of classical economics. It is suggested that the failure of socialism and the triumph of classicism as candidates for the position of orthodox theory during the nineteenth century was due to the fact, as explained above, that for at least the first half of that century competition was relatively effective as an instrument of social control. The breakdown of competition has been explained in the part devoted to the criticism of classical theory.

Types of economic institutions have been partially explained in this study as expressing the domination of classes or groups. Types of economic theory, or institutions in a certain sphere of thought, have been partially explained as rationalizations by or for dominant classes. Thus the Canonist Doctrine was a theorizing of the clerical attitude toward economic problems. Mercantilism was a rationalization of the attitude of merchants and the absolute monarch. Physiocracy was the theorizing of the agrarian reformers. Classicism and Marginism were theorizings of or in the spirit of the industrialist. The Newer Capitalism is a rationalization of large-scale industry. Welfare economics is a search for an ideal economic institution by scholars and artists. (In line with this method of approach, collectivism might be called a rationalization of the attitude of labour, the wage-earning classes. Yet collectivism is a name which covers a rather wide variety of institutional patterns. To simplify the complex subject, collectivism will be divided into two typical forms, socialism and communism.)

To make perhaps a rather arbitrary distinction, socialism is a reform movement typically of middle class origin, instituted and led by university trained men. Its method typically is evolution rather than revolution. It aims at the welfare of all groups or classes—workers, technicians, and consumers. It aims at the realization of reforms through the instrumentality or at least under the protection of the political state. Socialism is in harmony with a political democracy based upon universal suffrage. The socialists as a group favour less inequality in the distribution of wealth. Under the collectivistic ideal only workers should be paid. Unearned income should be abolished. The pay for work may be according to efficiency, according to need, or all may receive equal pay. The type, socialism, as understood in this study, is that which favours a moderate inequality of income.

Communism as distinguished from socialism is more of a working-class movement. It may be realized by revolution if necessary, as in the case of Soviet Russia; although the adoption of communism by popular ballot might be expedient. Under the Russian type of communism advantages in income and privileges were first given to members of the old wage-earning classes.¹ In the course of time, however, this class distinction is done away, since modern industrial society, collectivistic or otherwise, operates through much the same technical mechanisms; and class distinctions among workers arise, such as those between skilled and unskilled labourers. In the distribution of wealth the most radical communists, as for example Mr. G. B. Shaw,² demand equal pay for all. Finally, in the most radical form of communism there is centralized autocratic control of both production and consumption. Communism of the type made familiar by the events of the last decade is consistent with a centralized bureaucracy and limitation of popular vote.

¹ Pasvolsky, Leo, *The Economics of Communism*; also Douglas, P. H., part ii in Laidler and Thomas, *The Socialism of Our Times*.

² Shaw, G. B., *The Intelligent Woman's Guide to Capitalism and Socialism*.

Since both socialism and communism are behaviour patterns or moulds in which the material of human nature may be formed, the question of the choice of collectivism over individualism, or the choice within collectivism between socialism or communism, depends on one's view of the material of human nature. Although there are other conditioning forces objective to man, such as the geographic environment, still it is probable that the solution of social questions depends mainly upon the amount of plasticity in human nature. As discussed in the chapter on Institutionalism, one might divide psychology into two general types, one which emphasizes and one which minimizes the amount of self-seeking rationality in human nature. The rational, self-seeking type of human nature was emphasized by the utilitarians, but the non-rational type has been emphasized by modern psychologists. The socialists and social reformers like J. A. Hobson are inclined to assume a considerable element of rationality and self-interest in human nature. In other words, the more conservative of the collectivists would reckon on a considerable admixture of the economic man in economic organization. Reformers of this type are in favour of some inequality in remuneration. This is held to be necessary as an incentive or inducement to greatest productive effort. (It has been pointed out that the Russian experiment of equal pay was unsuccessful and that the Soviet authorities have replaced the virtually uniform wage by a wage rate with seventeen categories.¹ "In this new wage system the highest category receives eight times the wage of the lowest. Workers are thus given a material inducement both to raise themselves to a higher category and to prevent their falling to a lower.) Payment by results was also enthusiastically adopted and two-thirds of the workers in manufacturing and three-quarters of those in the building trades are now paid by piece-rates." . . . ("Many idealists will undoubtedly object to this apparent concession to the acquisitive spirit and will urge that,

¹ Cf. Douglas, P. H., in Laidler and Thomas, *The Socialism of Our Times*. p. 341.

since men should work for the general good, they should be paid equally. But while most men can rise to heights of great devotion at moments in their lives and while a few may even maintain this attitude throughout, it seems probable that the great mass of mankind cannot permanently give of its best if denied the hope of economic reward.¹ All this assumes a certain fixed texture of human nature. It may be correct or the reverse; but the assumption by an economist of a certain psychology on the basis of which he decides industrial and economic problems may be following the example of the classicists and marginists whose utilitarianism has been rejected by the specialists in psychology. This issue the author holds, although fundamental to economic problems, is not the work of the economist. It is a responsibility of the psychologist; although it is the function of the economist to accept and apply to his own particular problems the conclusions reached by his co-workers. Just how much incentive is necessary should be a subject for experiment. The institutions of property and inheritance and of immense profits to the business man was assumed by the classicists as a necessary incentive to industrial initiative and the accumulation of capital. Ricardo held that if the business man could not reap the results of his industry and keep them for the benefit of his family, industry would fall off, the total amount of wealth in the community would decrease; and this would be more injurious to the poor labourer than to the rich capitalist himself. While this view is still earnestly advocated by such men as George Roberts and Andrew Mellon, there is some ground for doubt as to whether it is still a matter of robust conviction among the masses of the people. J. A. Hobson, as discussed in the last chapter, avers that the rich industrialists, like Rockefeller and Ford, would do their best for a tithe of what they now receive. This again is merely a matter of opinion. It might be held that since inventors and scientists and engineers do their best for a tithe of what

¹ Douglas, P. H., in Laidler and Thomas, *The Socialism of Our Times*, p. 38

Rockefeller and Ford would receive under Hobson's dispensation, the rich industrialist would do his best for 1 per cent of what he now receives. Here again we are in the field of complete conjecture. (The classicist demands a huge profit as an incentive. The liberal proposes a smaller but still a generous one. The socialist holds that the moderate differential pay on a scale of eight to one for the most efficient as against the least efficient is an adequate incentive; and, finally, the communist maintains that men will do their best even if they all get equal pay. Out of this welter of conjectures there is no way but actual experiment. And Soviet Russia is furnishing the first scientific approach to this subject.) The abandonment of equal pay for differential wages is in favour of the socialist contention. But unequal pay may be a temporary recession for the purpose of enlisting the co-operation of managers, technicians, and skilled workers who were conditioned in a less democratic social order; or, on the other hand, it may be following out the line suggested by experiment in the human nature represented by the rising generation of industrial Russians.

The psychology underlying communism is a more radical type of psychology. It lays much less emphasis on the economic man motivation and more upon the idea of the plasticity of human nature. The substitution of instinct for reflection directed by self-interest, and the later substitution of prepotent habits for instincts, puts the communistic approach more in harmony with the evolution of psychological theory. Thus the evolution of psychology seems to give more and more a justification for radical thought. We have already quoted the dictum of J. A. Hobson that the validity of modern socialistic and communistic principles and schemes turns upon the question of the nature and amount of the adaptability of human nature. Radical movements in social experiment are thus the corollary of the radical trend in psychology. The Pavlov experiment in behaviouristic psychology is the forerunner of the Soviet sociopolitical experiment. Communism assumes that the mass of

men are 100 per cent or nearly 100 per cent plastic. Of course there are exceptional men, the leaders, men of originality or power or intelligence. These men will be leaders and not routineers or followers. Here again one can only pose a problem which it is the function of other experts to solve. Is the desire for wealth and power, which makes for aristocracy and the breakdown of collectivism, an instinct, a trait of original human nature, or is it merely a characteristic of certain types of creative and dominant men? And do people, or people of the dominant and creative class, fall into psychological types like Shänger's, on the principle of a biological law like the law of chance variation? If this is so, collectivism is merely the type of institution which brings a different type of leader to the fore. (The economic man becomes the leader under the institution of individualism through the alliance of big business and practical politics. But collectivism conditions the emergence of a different type, the theoretical and social man.) Under collectivism political leadership may coexist with the simple life. Paul H. Douglas holds that one of the reasons why the communists have been able to retain control in Russia is because the workers and peasants have become convinced from observation that the vast majority of communists are not trying to obtain a soft life for themselves. No communist, however high his station, can receive more than one hundred and thirteen dollars a month, which is a smaller salary than that drawn by a skilled technician if he does not become a member of the communist party.

The psychology of communism, then, emphasizes a moral leadership of the few and the plasticity of the great mass of men. It emphasizes the predominance of the post-natal over the pre-natal in human nature, the dominance of habit over instinct and rational self-seeking; it emphasizes the social significance of the conditioned response. Curiously enough this same theory was advocated by one of the earliest socialists, Robert Owen, a successful textile manufacturer, philanthropist, and socialistic doctrinaire. Owen in his day was something of

a prophet crying in the wilderness; although his intellectual idiosyncrasy was partly excusable in the light of his practical success. In *A New View of Society*, 1817, he writes as if he were a member of the modern school of behaviouristic psychologists. He holds, after the manner of J. B. Watson, that children when young can be trained into any type desired. They can be taught any language. They can be imbued with any sentiments, beliefs, or bodily habits and manners, "not contrary to human nature." The child of an aristocrat can be brought up as a class-conscious proletarian. The child of a proletarian can be brought up as a class-conscious aristocrat. To elaborate Owen's idea more in the language of J. S. Mill, if brought up in the Western world, they can be made into good Christians, but in India they would be good Buddhists, and in China good Confucians. "Children are . . . passive and wonderfully contrived compounds; which, by an accurate previous and subsequent attention, founded on a correct knowledge of the subject, may be formed collectively to have any human character." The younger a child is, the easier he is to condition and recondition: ("To train up a child from infancy in the way he should go is the most easy process for the formation of character; while to unlearn and to change long acquired habits, is a proceeding directly opposed to the most tenacious feelings of human nature.") Again, "The infants of any one class in the world may be readily formed into men of any other class." This conception of the plasticity of human nature, and, as we would say, the power of a conditioned response, made Owen an optimist toward the labouring classes. The children of the labouring class, like those of any other, could, according to Owen, be conditioned into harmony with any institutional scheme that would meet the approval of the social leaders. Leadership in this case involves responsibility for choosing the institution, the desirable pattern of human behaviour, and for conditioning the younger generation into that pattern.

Robert Owen not only had a notion of the plasticity of

human nature, but he had definite notions as to the forms in which it should be moulded. He had also a very definite aversion to certain moulds or types of character. Among these he enumerated:

- (1) Commercial men, for they seek gain at the expense of the moral habits and comforts of those they employ.
- (2) Men of law, for they are trained to endeavour to make wrong appear right.
- (3) Political leaders, for the trammels of party compel them to sacrifice the well-being of the community and themselves to a mistaken self-interest.
- (4) Heroes and conquerors, for their minds have been trained to consider the infliction of human misery a glorious duty.
- (5) The fashionable or splendid, for they are trained to deceive and be deceived, to accept shadows for substances, and to live a life of insecurity and consequent discontent and misery.
- (6) Expounders and defenders of religious systems, for many of these are actively engaged in propagating imaginary notions, which cannot fail to vitiate the rational powers of man, and perpetuate his misery.

Owen draws up a list of seven true principles:

- (1) Character is formed for the individual.
- (2) Any habits and sentiments may be given to mankind.
- (3) The affections are not under the control of the individual.
- (4) Every individual can be trained to produce far more than he can consume, while there is sufficiency of soil.
- (5) Nature has provided means by which population may be maintained in the proper state to give the greatest happiness.
- (6) Any community may be so organized as to withdraw vice, poverty, and in a degree misery, and enjoy more happiness than at present.
- (7) Principles hitherto assumed are erroneous.

It will be observed that this philosophy of human nature is similar to that expounded in the last chapter as characterizing the latest trend in the field of psychology. This is the view of human nature that might justify the most radical form of collectivism, communism. (If human nature is plastic, as here assumed, it may be that men can be trained and conditioned to do their best work under conditions of equal pay.) Just as a millionaire will work for nothing during war-time and as

a workman or farmer under influence of war-time propaganda will risk life and health, and slay zealously as many as possible of his fellow-men whom he has never known and against whom he has no personal grudge. If a man can be propagandized to fight and die for the nationalistic fallacy, why can he not be propagandized to live and work for the good of the collectivity, especially if, as a concession to the economic men, he shares in a collective benefit and gets his *pro rata* share of the consumable economic goods? The author of this study has no attitude on this subject. It is not a matter of personal opinion but of scientific research. And here perhaps the economist and political scientist may lead the way for the psychologists. The Russian social experiment may anticipate the work of social psychologists who are trying to handle social material objectively and by quantitatively measurable standards.

This notion of the plasticity of human nature in childhood, of the force or necessity of early conditioning, may explain the almost universal failure of socialistic experiments up to the present time. They had been made by adults who as children were brought up in an individualistic *milieu*, and as socialists they were carrying on experiments in the midst of an environment which was prevailing individualistic. Would this not account for the failure of Owen's socialistic experiments in the new world? Perhaps also that failure was due to the fact that frontier conditions were suitable for the institution of individual initiative. The first theory, the greater susceptibility of children to conditioning, might explain Owen's success in his social experiments at New Lanark, for when he assumed charge of that enterprise the bulk of his employees were under ten years of age, and in a few years he changed the attitude of the industrial community from hostility to good will. This type of psychology may explain the success of the Russian communists as well as the Jesuit missionaries. The Russians may retreat from capitalism toward differential wages as concessions to the ineradicable individualism and self-interest in which men were conditioned in an earlier regime;

but it may be that the principles of the original communism can be realized in the rising generation. They have an international youth day. Boys and young men between the ages of fourteen and twenty-two can become members of the Communist Youth Party. They are being trained to believe that all they can earn above a bare living belongs to the state, and that it is glorious to earn as much as they can. They are being trained not only to rejoice in work but in the hardest kind of work. It is their pride to be known as Stalin's shock troops. This is the collectivistic way for a society to pass through the stage of the industrial revolution. Yet when the most pressing needs shall have been supplied, when the national industries have all reached the "saturation-point," will Russia give an example of collectivistic welfare economics as well as collectivistic production economics? Will the Supreme Council of National Economy admit poets and dramatists and philosophers to the committees and collegiums, and will the youth of that day be trained and conditioned to produce the greatest national welfare, the final test of health, happiness, and culture? This also is one aspect of the great Russian experiment. It is a common complaint among representatives of the social sciences that social science, especially economics and politics, is backward in comparison with physical science. The reason for this is probably because there is no general opposition to experimentation in physical science. Mechanical inventions are welcomed and applied. On the other hand proposals for social change are met with hostility. To this condition the Russian experiment is the great exception. It may be a substitute in social science for the physical laboratory; and may stimulate hypotheses in the social field through their possibility of application and verification.

One form of contrast between socialism and communism is that communism proposes a centralized autocratic control of both production and consumption, whereas socialism is consistent with a large amount of decentralization. Socialism is a general term to connote the development of public enter-

prise—municipal, state, and federal—in conjunction with a large amount of economic activity by voluntary co-operative associations, and a certain amount of free individual initiative, probably in the field of agriculture, and of free individual activity in such lines as art, authorship, and so forth. This mixture of centralization and decentralization, of corporate and individual activity, gives mobility and plasticity to the system and makes possible both social co-operation and individual freedom. This type of socialism is consistent with political democracy under conditions of universal suffrage. The exponents of this view look askance at the autocracy of Russian communism, and think that such centralization is inimical to liberty. Here again we are in the field of theorizings and surmises which should ultimately be silenced by actual experiment. It might be said, however, that no one has doubted the efficiency of a dictatorship of bureaucratic autocracy as an agent of good government and general welfare providing it was a benevolent autocracy. The historic difficulty has been to keep autocracy benevolent. It may be, however, that the opposition to political centralization is a lag from the days of frontier Jacksonian democracy. Modern society has become highly specialized. We have carried forward the division of labour far beyond the conception of Jacksonian democrats. Specialization requires interdependence, that is, the specialist in one field is necessarily dependent for the goods and services that he does not produce upon the specialists in other fields. Political autocracy is merely one term for the dependence of men who are not specialists in government upon the men who are for the maintenance of law and order, the production of immaterial benefits, and the direction of industry, if socialism or communism seems to be the most desirable pattern of conjoint behaviour. Other men besides the political administrators are autocrats and dictators when conferring their special service. The traffic policeman is a benevolent autocrat in enforcing obedience to traffic signals. When one has a toothache, the dentist is an autocrat. The professor of mathematics is an

autocrat in the classroom, and the pharmacist is an autocrat in the prescription department of a pharmacy. These men and others, representing innumerable occupations, are all autocrats and dictators within their own special fields; but our institutional arrangements have been so successful in the majority of cases that these men are benevolent autocrats. Wherever they are not, society has invented machinery for replacing them by others who are. Is it possible to have benevolent political or administrative experts who work for moderate salaries in the public interest? Here again we are in the field of another discipline, political science, and out of the special sphere of the economist. The answer of the optimist in the field of government would be that the merit system, if it completely replaced the present system of political parties and practical politics, might make a political autocracy no more to be feared than the autocracy of physicians, chemists, or professors. At any rate the problem of how to make government efficient and at the same time responsible to those whom it serves is not a hopeless one from the point of view of behaviouristic psychology and institutionalism. The Russian experiment, again, if it succeeds, may furnish valuable information on this head. After all, the notion of political democracy, the assumption of the well-informed public-spirited citizen, the omniscient voter, may be as much a fiction as the universal economic man or the superstate. James Bryce once observed that "all varieties of government can be reduced to one form—the government of the many by the few." Political democracy may have worked fairly well under frontier conditions, like those of the New England town meeting, when the political problems were simple and local problems. But when political problems are interstate and international, when they concern such matters as the tariff, taxation, the world court, the international debts, one is in the sphere of material too difficult for any but the specialists. The belief in old-fashioned democracy, one suspects, is due to propaganda emanating from practical politicians or business men who rule through them

and who control "public opinion" by means of propaganda. Under actual present conditions political democracy is more a euphemism for practical politics and boss rule than a term that means government in the interest of the general public. Centralization and autocracy, provided it is made a benevolent autocracy by the operation of the merit system or some system of appointment by boards of representative men may promote genuine democracy, the security, the welfare, and the maximum possible creative activity of the interdependent specialists in modern organized society. The city manager, although appointed by a small group, may be a more genuinely democratic executive than the popularly elected mayor.

It will be recalled that earlier economists, especially the physiocrats and Adam Smith and his followers, had much to say of the natural order in relation to economic life. Natural law, natural rights, the natural order were supposed to have an objective and cosmic validity. And the natural order in the sphere of economics and politics was presumed to imply a large measure of freedom for individual initiative and a greatly restricted sphere of government intervention. This theory of an objective natural order is held to be invalid, because, as pointed out by Professor Haines, the idea of a natural order, natural law, and natural rights, has been pressed into the service of all kinds of social philosophies and social class interests from the age of the Hellenic priesthood to the most recent times, as illustrated by the arguments for judicial review on the part of members of the United States Supreme Court. The appeal to natural law, then, is an appeal based on the unconscious wish, or class interests and assumptions. As presented in the cases illustrated by Professor Haines, it is merely a dignified way of begging the question. As pointed out above, the English classical economists identified the economic system which they advocated with the natural order. It might be possible for socialists to make this same claim with possibly more objective evidence. In the system of von

Weiser¹ he assumed a fictitious communism as the natural order, and considered to what extent the classical laws of value would be valid under such conditions. It is suggested that socialists might possibly present a claim for some form of socialism or collectivism as conforming to some assumed natural order, or at least approximating it more closely than any other economic institution. To give any value to this claim it would be necessary to find an objective definition or test of a natural order. Following are several suggested definitions.

- (1) That which seems natural, as the "grand old principle of natural liberty," to Adam Smith, the Divine and also natural order of monarchy to the absolute monarch, the given ecclesiastical order to the priest, and judicial review to the judge of the Supreme Court. Another way of saying this is that those habits in which one has been conditioned seem part of the natural order. This is especially true of habits acquired in early infancy. The natural order, then, is that to which one has been conditioned.
- (2) The natural order, or that mode of behaviour which is in harmony with the natural order, might be defined as that which comes into existence without the need of public support, propaganda, and institutional conditioning. There is a legend that the Russians have applied this test for the selection of desirable institutions. All support through finances or propaganda is to be withheld from the church, the family, and so on. If these institutions survive, the inference is that they are natural, or are efficient modes of satisfying a basic human need. Although it is said there is practically no restriction on divorce in Russia, it is also said that the family exists as successfully in Russia as in other countries where it receives institutional sanction.
- (3) It has also been suggested that since the term "natural" is the antithesis of the "artificial," the term "natural" could be used as synonymous with the biological in contrast to the institutional. On this view the natural is that which conforms to biological laws. On the basis of the same distinctions, certain social idealists, like Rousseau and Professor Allport, identify the institutional with the artificial, and advocate the abolition or the reduction of institutional arrangements.²

¹ *Natural Value*.

² Allport, F. H., "Our Institutional Habits, Are they Progress or Slavery?" *Harper's Magazine*, January 1931.

There is some ground, however, for presenting the theory that some institutional arrangement may be natural. There may be some "natural institutions" as well as artificial institutions. Statisticians and biometricians have suggested an objective test for the natural in the sense of the biological. Almost all biological traits, if presented on a graph after the manner of the statisticians, will fall into the bell-shaped curve. The size of leaves on a tree, the height or weight of men, if these data are arranged in a series from the least to the greatest, will represent a bell-shaped curve or curve of normal variation. The same is true of the scholarship of students, and of practically all anthropometric data. This test of the conformity of tables of economic and social data to the normal curve or curve of chance distribution may possibly be a test of the soundness or unsoundness of an institution. If the data respecting an institution conform to the bell-shaped curve, the institution may be said to be a good one, i.e. one that is conformable to human nature. If the curve is skewed or is a J-shaped curve, the inference is that the institution is socially undesirable, that it strains essential human nature by forcing it into an alien and unendurable form. Professor Allport's assumption that the data of institutions, if presented in the form of graphs, will fall into J-shaped curves or pronounced skews, is thus held as grounds for the opposition to institutions in general. Reference was made in the chapter on Institutionalism to the research of Mr. Milton Dickens regarding the behaviour of motorists at crossings where there are stop-signs and where there are no stop-signs. At crossings without stop-signs the behaviour of motorists in (1) stopping, (2) slowing down, (3) proceeding at slightly reduced speed, and (4) crossing without reduction of speed tended to conform to the bell-shaped curve; while their behaviour at crossings with stop-signs approximated the J-shaped curve. The implication is that the institution of stop-signs or regular time interval traffic lights is a non-natural, and hence an objectionable, institution.

However, there has been invented another institution for the regulation of motor traffic. A mechanism is arranged so that when a car crosses the road at a certain distance from the crossing the red light is automatically thrown on. Thus if two cars were approaching the crossing on the intersecting roads, the first car to reach the automatic mechanism would cause the red light to flash for the other car, so that the second motorist would stop naturally on the basis of the fear or withdrawal response. The behaviour of the motorists would be exactly the same as if there were no stop-lights, only that the light would give notice more quickly of the fact on which one would instinctively act. The implication is that this is a "natural" institution, one which facilitates and is in harmony with the essential biological elements in human nature.

If there is value in this method, it may mean a new and more objective and quantitative approach to the welfare problem and the valuation of institutions. It might furnish a scientific test as to the relative merits of individualism and socialism; or, under either system, it might furnish a test for the choice of institutions. In the issue of individualistic capitalism *versus* socialism, data might be collected on wages, salaries, rent, profits, interest, agricultural incomes, et cetera; and graphs might be made showing curves of the variation of these factors. These curves of distribution compared with the graphs of distribution under socialism, as in Russia, might furnish much material for significant analysis. By comparing frequency distributions with the probability curve, and noting variations, one may secure material for significant theoretical analysis in general. Thus possibly by an extension into economics of such methods as are being employed by Professors Thurstone, Rice, and Beyle in the field of political science there may be made available a firmer grasp on economic reality through an integration of academic theory and dialectics with political and social experiment.

But to return to the theory of collectivism, perhaps the strongest argument for collectivism is that only through some

form of central planning and control can there be maintained a balanced production, a proportionate amount of economic energy directed to all the different industries. And only by central planning and control does it seem likely that production can be made to balance with consumption, and that a proportionate amount of economic power may be devoted to the making of capital goods and consumers' goods. The need of central control on a small scale is obvious enough to even the modern advocates of *laissez-faire*. What is popularly called over-production is known to economists as maladjusted production.) To illustrate this within a restricted field, let us consider the case of a single industry, like the automobile industry, under conditions of individual free initiative and under centralized control. Different enterprises supply different parts, such as engines, bodies, the electrical system, wheels, tires, etc. Under either system of competitive or integrated industry there is first necessary an estimate of the probable demand, or the social need. If this should be, say, two million cars in a year, the individual producers have to guess at the amount to be produced, as each one is in the dark as to the number of units that will be made by his competitors. But, if this is decided in some way, then there arises the question of the proportionate production of the different parts. For every engine there should be one electrical system, one body, five wheels, etc. The demand for one engine is a demand for an electrical system, body, etc., since the parts are complementary goods. If several enterprises produce bodies, others, electrical systems, others tires, etc., there is inevitable a certain amount of uncertainty and guessing, as all are more or less in the dark as to the production plans of the others. If there are two million engines and two million bodies produced, but only six million wheels, then there is an under-production of two million wheels, because that number in addition is necessary to combine the different parts into assembled machines and to allow them to pass into the final buyer's market. From the point of view of the producers of engines

and bodies, however, there is an over-production of engines and bodies, because the assembled parts can be combined into only one million two hundred thousand machines, and they have over-produced 800,000 units. Under these conditions there emerge the economic laws of value as a corrective to the inadequate guesses of the production departments. Wheels and tires, in this case, receive an imputation of high economic value because of their relative scarcity, and engines and bodies receive an imputation of low economic value, because of their abundance relative to the other parts, although they are not in excess of the market demand for cars. The only way to restore the adjustment is for the makers of engines and bodies to shut down their plants until the makers of wheels and tires catch up. Meanwhile the unemployment created by the maladjustment reduces the general purchasing power so that there is a lessened general demand, and the two million engines and bodies come to represent an over-production in place of a mere maladjustment production. In contrast to this more or less blind system of production is that of central control of production by a group or committee with authority. If the whole automobile industry were under one central board, and there was an estimate of a social need for two million cars, the order would be sent out for two million engines, two million bodies, two million electrical systems, ten million wheels, and tires and other parts and accessories in proportion. The parts would combine, supply and demand of complementary factors would equate, the whole mass of materials would run out of the factories on the wheels, and the plants would be cleared for a repetition of the process.

But, in the large, would two million of the automotive units be too many or too few for the general market? That would depend on the amount of foods, clothes, houses, theatres, books, golf courses, hotels, libraries, colleges, lake and mountain resorts—all of the other varieties of economic goods and services besides automobiles. Two million automobiles might be too many although the people greatly desired four million

because some other goods or services were under-produced or over-produced. If the wages and salaries of all the wages and salary-earners were estimated at \$25 billion while it ought to have been estimated at \$35 billion to balance or purchase the goods produced, then there would result an "over-production," a maladjustment of production like that of auto bodies and engines when the estimate of the number of wheels was too low. As the over-production of certain parts of the automobile would disappear under the control of a central production board in the single industry, so general "over-production," like that at present of wheat, cotton, steel, automobiles, and many other commodities, would probably disappear under a socialized system of central planning of production. This system, if well managed, if operated under a strict merit basis of political control, might well explain away the present riddle of how a people can have an abundance of raw materials, labour, machinery, technique, skill, ambition, and money, and yet suffer from lack of elementary needs by the millions. It might escape the dilemma of "over-production" and dire poverty.

Perhaps these illustrations will suggest why some socialists or social reformers have not been particularly respectful in their attitude toward economic laws. (Economic value, according to the older theory, is an imputation arising out of scarcity as well as utility. And the "value" due to scarcity, or relative scarcity, as in the case of complementary goods (or practically all goods), is a dignified way of saying that economic society is planning in the dark or working by guesses and blind hunches. According to the socialists, the business of the economist is to familiarize himself with all the concrete aspects of production and need and demand so that he can visualize a balanced system, a normal proportion of economic factors according to the realities and potentialities of the time. On the basis of this analysis, he or they can recommend an increase or decrease of this or that element so that the different materials will blend into a harmonious variety of consumption goods,

and pass into the possession of the consumers just as the complete automobiles roll out of the plant, and clear the field for further organized production.'

The economic "law" that appeals to the socialist is the law of the normal proportion of factors. This, as was explained above, includes all the more specific concepts of technical economics—increasing and decreasing returns, diminishing utility, supply and demand. Value to the collectivist is not to be imputed to objects because of scarcity, or to be measured in money. Economic "value" of this sort is the symbol of ineptitude and lack of intelligent co-operation; and it disappears with intelligent and socialized planning and control.) Real economic value is a fixed physical or chemical quality, like calories and vitamins in food products, which are the same in a bushel of wheat whether the national output is 500,000,000 bushels or 1,000,000,000 bushels. (In other words, under an individualistic system, value is an imputed quality varying largely with scarcity or inadequate social planning. Under a socialistic system value is a term for objectively measurable means for satisfying human wants.) In other words, under individualism, the problem is for each person or separate economic agent to get the greatest possible sum for himself. This may be done under certain conditions by increasing one's output of goods and services. But frequently the problem is to establish or maintain a relative scarcity of one's own commodity or service (monopoly) or to shift one's capital or managerial activity into those fields in which the given output is scarce relatively to the demand (individual initiative and enterprise). Under socialism the problem is to increase production up to the point where the economic needs of all are met, or to where further production of economic goods is deemed to create less social welfare than an increase of non-economic activity. There is no purpose in restricting production so as to effect a favourable exchange ratio for a restricted class of goods. The problem of value and distribution under socialism is to so distribute economic energy in different lines as to attain

an equal relative abundance or scarcity of all goods or services with reference to the demand or the general need. Hence under a collectivistic economy fluctuations in the exchange ratios of different goods and services would be considered as an evidence of administrative failure or governmental ineptitude rather than a condition of disequilibrium which should be left to the long-run adjustment of the law of supply and demand. The prompt revision of production plans under the unified and controlled economy is thus in contrast to the slow or lagging adjustment of the individualistic economy. And under modern individualism the adjustment may actually not be realized, because not all of the events of the modern economic order are mobile and flexible. For example, the price of wheat has fluctuated within fifteen years between \$2 and 40 cents a bushel; but haircuts have maintained the customary price of 50 cents. The exchange rate has varied from one bushel of wheat for four haircuts to one and one-fourth bushels of wheat for one haircut. This fact of the existence of static and fluctuating elements in the economic system suggests why, as at present, there can be over-production from the point of view of one industry—wheat, and depression from the point of another—personal services like those of the barber, because the goods will not exchange with each other according to the principle of labour-time or labour-pain, and clear the market so that production can go on. A central planless economy, as illustrated in M. Illin's story of the growth of hat factories,¹ leads inevitably to booms and depressions, unless, as was argued in an earlier chapter, a general backwardness of industry, as during the early stages of the Industrial Revolution, combined with rapid invention, opens up an insatiable demand for capital or savings in a great many fields.

In other words, individualism does not seem to offer a satisfactory solution for the problem of technological unemployment. To illustrate how this problem might be met in a collectivistic economy, let us take the case of a farm family

¹ Illin, M., *New Russia's Primer*, p. 6.

under hypothetical frontier and modern conditions. There is a father and four sons working under primitive conditions. These necessitate hard work and long hours for all. Much of the work is done by hand; tools and machines are rude and primitive, and the motive power is the muscles of men and animals. The boys begin hard work while still in their early teens; and the income of the family does not comprise much beyond physical necessities. Contrast with this a composite picture of a modern wheat and dairy farm, with its great increase of output and its substitute of machinery for hand or animal labour. The combine, the tractor, the truck, the hay loader, the hay fork, the manure spreader, the tedder, the milking machine—all these increase the efficiency of labour. The result is that one man can do more work than was formerly done by five. What would be done with the four superfluous men? There are three possible alternatives. The first is less work for all. The father may choose to do most of the work when the boys are young, letting them enjoy a childhood mainly of play, and later years, to the age of twenty-five perhaps, in acquiring an education through study and travel. Then while still in unimpaired health and capacity to enjoy life he may turn the responsibility for the farm over to one of his sons, and spend his declining years in ways more suitable to his age. Another alternative is for more of the men to work, but a shorter day. There may be short hours for men and long hours for the machines; and the men may take turns in operating or supervising the machines. The alternative of self-seeking individualism would be for the father to send his sons away as soon as he had no need for their hard, full-time labour. If economic society happens to be dynamic, if big inventions are replacing each other rapidly, so that new plants are rising and absorbing the surplus labour of the farms, this may work no general hardship. It may offer a field for varied talent. But when economic society is relatively static, when the making of new machines does not employ all the men displaced by the older ones, the result is unemployment, declining effective

demand, failure of the market for goods, still further decline of effective demand, maladjusted production, and "over-production" on the part of some industries at the same time that there is widespread hunger and misery. The farm family, in any case, will not suffer as long as it is held together by bonds of affection. It will be a community, a socialized unit. Under dynamic conditions due to inventions and discoveries, the members may work harder and enjoy an increasing economic income. Under static or relatively static conditions they will collectively enjoy the results of past economic progress in the form of more leisure, more enjoyment of art, education, sport, social life, or other types of non-economic activity. But as a community, an elementary communism, the members will not be unemployed or unprovided for. Their scale of living will be proportionate to the efficiency of the family as a unit in production. They will consume what they produce; there will be no surplus; when productivity becomes great, they will increase leisure. So there will be no booms and depressions. This, of course, is on the assumption that the family is a group of socialized individuals. •Modern collectivism attempts to organize the great society on the same principles of mutual affection and goodwill as characterize the primitive family. To believe that this can be done one may be an ethical optimist or a behaviouristic realist, or a realistic investor or business man disillusioned with individualism because of the depression, or he may, perchance, be merely a scientific observer watching the Russian experiment.

The differences between individualism and collectivism are in valuations, assumptions, and methodological approach. Under individualism scarcity or relative scarcity has a great significance for the individual producer; for it is a condition of his gain, his relative reward. Under collectivism scarcity has no positive significance for the individual producer. His wages or salary are a proportionate share of the total group product. His individual gain is the maximum total product or the attainment of his quota. His security, his personal

honour or advancement or promotion, if there is differential treatment, will be conditioned on quantity of physical output or quality of services. Relative scarcity, under such conditions, will not be considered an evidence of business acumen and shrewdness, to be rewarded by wealth and power, and justified solemnly by marginalist imputation of value, but as an evidence of personal inefficiency or delinquency or of some inaccuracy of administrative functioning. In the private economy, or even the national or state economy, the individual preoccupation with scarcity in a special field (oil, cotton, wheat, rubber, coffee) may be theorized as "rationalization" or as the imputation of value in the marginalist analysis. But the collectivists are not interested in subjective and imaginary imputation of importance, or with relegating administrative responsibility for economic decisions to the unfortunate, the inept, or the stupid—the marginals. Nor are they interested in an exchange ratio based on fortune and privilege. They are interested in maximizing values in use, which are determined objectively in the case of food by chemical analysis, and in the case of other goods by the best expert knowledge. These values are to be apportioned according to need or capacity for use, which is to be determined not by a spurious "public opinion," which is a polite term for suggestibility to the propaganda of special interests, but by decisions made by committees of socialized experts and administrators.

(In the collectivistic economy productivity is measured in physical quantity or in ethical or aesthetic quality rather than in value in the modern market sense. Efficiency in production, as of wheat, would be measured in bushels, or in calories and vitamins. Value in this sense would be proportional to quantity.) The idea that 400,000,000 bushels might have more value than 800,000,000 bushels would, from this point of view, be an absurdity. But it might not be from the point of view of a monopolist speculator in the individualist economy. He might impute more value to the 400,000,000 bushels, and they might actually sell for more money on the market. Imputation here

would achieve objective reality in market price. In this case, scarcity would be a stimulating condition, a mechanical form of regulation. But in the collectivistic economy regulation would be carried on by the central planning commission. Under these conditions there would be no need for the individual to restrict production and make his commodity scarce relative to other goods in order to effect a favourable exchange ratio. Scarcity of one's commodity would bring no advantage. It would be considered as a piece of ill luck due to the niggardliness or caprice of nature, or it might be thought of as grounds for the reproach of inefficiency. Scarcity of an individual's commodity would not be a stimulus to production, because it would not enhance his reward; rather the reverse. He might be penalized as an inefficient producer; or, at the best, he would share in a smaller social product. Under these conditions the imputation of "value" to economic goods because of relative scarcity would appear as an outworn fiction. Its usefulness is conditioned entirely upon the individualistic economy, the money market, and the absence of any pre-determined proportionality in the different industries or parts of industries.

The spurious character of imputation within a socialized group would be evident if it were applied in the case of the farm family, the father and four sons described above. One of these might specialize in producing grain and hay; another, in the dairy; a third, in garden and fruit; the fourth, in the care of machinery; and the fifth, in purchasing and marketing. If one, say the fruit and garden specialist, should restrict his output in order to be able to impute a higher value to a smaller sum, and so get more grain, dairy products, etc., as his share, the project would be considered absurd, and it would be evident to the others as a failure to co-operate in achieving the maximum production possible, on which the welfare of the family would depend. But (in the great society, where relations are more impersonal, the sabotage of the individual would be so obscured in the mass of market products that his anti-social action might

not only escape condemnation, but even, in the individual economy, gain him wealth, power, and social esteem. The economic theory which supports this kind of economic behaviour is called the imputation of value. Under certain conditions, as discussed in the chapters on classicism, this may be a useful fiction—if there is free competition, private property, mobility of capital and labour, the police type of government, great, unexploited natural resources, rapid changes in the form of mechanical inventions, and capital accumulation depending upon a margin between individual earnings and spendings. But when population has encroached upon resources, when government has undertaken vast developmental activities as well as protection, when long periods of training make the most skilled labour immobile, when competition is restricted by inflexible and immobile elements in the economic system as well as governmental regulation and partial monopoly, and when capital accumulation, aided by social savings, like corporate surpluses and the increase of loanable funds made possible by central reserve banking, has overtaken invention, and finally, when people get a positive sense of their interdependence through a study of social science, or learn it through the disaster of a business depression, the theory of imputation looks decidedly outmoded.

Perhaps the opposition of individualism and collectivism may be indicated more convincingly by placing items in parallel columns.

<i>Individualism</i>	<i>Socialism</i>
1. Economic value based on utility and scarcity.	1. Economic value based on utility. Scarcity in relative sense obviated by central planning.
2. Imputation of value to scarcity.	2. Value objectively determined by chemical or other scientific analysis.
3. Individual consumer's and producer's surplus held as natural.	3. Individual or special consumer's and producer's surplus considered as special privilege and evidence of administrative failure.

Individualism

4. Initiative by the self-seeking and aggressive.
5. Self-appointment by practical politicians camouflaged as political democracy.
6. Social control attainable in part by the automatic action of market price.
7. Irregular production—booms and depressions.
8. No short-time adjustment or proportion between saving and spending—capital and consumers' goods.

Socialism

4. Initiative by select committees of experts and socialized administrators.
5. Public administrators assisted by scientific specialists, chosen by the merit system.
6. Social control attained by central planning in place of the lagging and imperfect control of the price system.
7. Regularized production—no depressions and no booms. Greater average production, because central planning makes possible full utilization of plant and equipment.
8. Central planning or short-time adjustment of saving and spending.

So much for general aspects of individualism and collectivism. Now for a consideration of certain specific aspects of collectivism in its relation to economic theory, such as distribution under the collectivistic economy, or wages, rent, interest, and profits under the collectivistic system. It has been held that under collectivism the only distributive share would be wages, that the only economic inequality would be due to differential wages, and that such sources of economic inequality or unearned income as rent, interest, and profits would be eliminated. Von Wieser,¹ however, attempted to show that the laws of rent, interest, and profits, as expounded in the individualistic, marginist economics, were universal; and so would apply in a "natural" or communistic society. In the communistic society there would be time preference for money or goods, there would be differences of fertility and other qualities between different pieces of land, and there would be differences of skill and managerial ability among men. So, in a collec-

¹ Von Wieser, *Natural Value*.

tivistic economy, these facts must be borne in mind by the economic authorities, who will then impute different values to the different factors as in the individualistic economy. The view advanced in this study is that while there would be a certain kind of rent, interest, and profit in a collectivistic society, they would differ from that in an individualistic society.

First, as to rent. The law of rent has been considered in the chapter on Institutionalism, where it was discussed as the institution of rent. Under this caption it did not seem quite so formidable. And it appeared that rent, so called, could assume a number of forms, which differed among themselves and gave an opportunity for human valuation and choice. But to meet von Wieser on his own ground, let us assume that rent is the kind of institution Ricardo described, and that it is proportional to the differential fertility or preferable location of different pieces of land.

To simplify the argument, let us assume a man who owns one thousand acres of wheat land. The land is all of a price, but different parts vary in fertility. There are five grades of land, classified according to possible production.

<i>Grade</i>	<i>Acres</i>	<i>Production in Bushels per Acre</i>	<i>Price per Bushel</i>
A	200	30	\$1.00
B	200	25	
C	200	20	
D	200	15	
E	200	10	

In the course of time the farmer has five sons, all of whom grow up to be stalwart men, rural minded, and disposed to follow the occupation of the father. Let us assume, also, to simplify the problem, that the time of the illustration was when a two hundred acre wheat farm meant full work for one man. The farmer at first operates only two hundred acres, having bought the rest for speculation or for the future family.

CASE I

Output	..	..	..	..	..	6,000 bushels
Gross income	..	..	..	..	..	\$6,000
Capital expense plus expenses of living	..	..	..	..	..	\$2,000
Labour income	..	..	..	..	..	\$4,000 plus expenses of living

No rent, as abundance of A-grade land.

CASE II. 400 ACRES OPERATED BY FATHER AND SON

<i>Grade</i>	<i>Acres</i>	<i>Product in Bushels</i>	<i>Price per Bushel</i>
A	200	6,000	\$1.00
B	200	5,000	

Output	..	..	..	..	..	11,000 bushels
Gross income	..	..	..	..	..	\$11,000
Capital expense plus expenses of living	..	..	..	..	..	4,000
Net family income	..	..	..	..	..	\$7,000
Rent	..	..	..	..	..	\$1,000
Labour income above living expenses	..	..	..	..	..	\$6,000
Labour income per man	..	..	..	..	..	\$3,000

CASE III. 600 ACRES OPERATED BY FATHER AND TWO SONS

<i>Grade</i>	<i>Acres</i>	<i>Product in Bushels</i>	<i>Price per Bushel</i>
A	200	6,000	\$1.00
B	200	5,000	
C	200	4,000	

Output	..	..	..	..	..	15,000 bushels
Gross income	..	..	..	..	..	\$15,000
Capital expense plus expenses of living	..	..	..	..	..	6,000
Net family income	..	..	..	..	..	\$9,000
Rent	..	..	..	..	..	\$3,000
Labour income above living expenses	..	..	..	..	..	\$6,000
Labour income per man above living expenses	..	..	..	..	..	\$2,000

CASE IV. 800 ACRES OPERATED BY FATHER AND THREE SONS

<i>Grade</i>	<i>Acres</i>	<i>Product in Bushels</i>	<i>Price per Bushel</i>
A	200	6,000	\$1.00
B	200	5,000	
C	200	4,000	
D	200	3,000	

Output	18,000 bushels
Gross income	\$18,000
Capital expense plus expenses of living ..	8,000
Net family income	\$10,000
Rent	\$6,000
Labour income above living expenses ..	\$4,000
Labour income per man above living expenses	\$1,000

CASE V. 1,000 ACRES OPERATED BY FATHER AND FOUR SONS

<i>Grade</i>	<i>Acres</i>	<i>Product in Bushels</i>	<i>Price per Bushel</i>
A	200	6,000	\$1.00
B	200	5,000	
C	200	4,000	
D	200	3,000	
E	200	2,000	

Output	20,000 bushels
Gross income	\$20,000
Capital expense plus expenses of living ..	10,000
Net family income	\$10,000
Rent	\$10,000
Labour income equals living expenses.	

Case v represents marginalist production. There is one son, the fifth, who has no opportunity to work on the farm, unless there is a change of crop, or a change to a more varied or more intensive form of cultivation.

Now to consider the difference between rent in the individualistic and in the collectivistic economy. The five cases may represent five individuals in five different situations or the family as a collective unit in five different situations.

<i>Individualistic</i>	<i>Collectivistic</i>
<i>Case I</i>	—
Income of father, \$4,000 plus living expenses	
<i>Case II</i>	
Income of father, \$4,000 plus living expenses	Family income, \$7,000 plus
Income of son, \$3,000 plus living expenses	Average income per worker, \$3,500 plus

Case III

Income of father, \$5,000 plus	Family income, \$9,000 plus
Income of first son, \$2,000 plus	Average income per worker,
Income of second son, \$2,000 plus	\$3,000 plus

Case IV

Income of father, \$7,000 plus	Family income, \$10,000 plus
Income of first son, \$1,000 plus	Average income per worker,
Income of second son, \$1,000 plus	\$2,500 plus
Income of third son, \$1,000 plus	

Case v

Income of father, \$10,000 plus	Family income, \$10,000 plus
Income of first son, Expenses	Average income per worker,
Income of second son, Expenses	\$2,000 plus
Income of third son, Expenses	
Income of fourth son, Expenses	

According to this analysis, if one accepts the same institutions and the same postulates and presuppositions as Ricardo, there is a very vital difference between rent in an individualistic and in a collectivistic economy. In the individualistic economy, if conditions are static except that population is growing, or in so far as population grows faster than new land is available or new opportunities in other occupations besides agriculture, rent increases rapidly and wages decline. The result is an aristocratic economic order. The landowner in Case v has a rent two and one-half times as great as his labour income on the original A-grade land. He grows rich with the declining prosperity of his children. In the collectivistic order the case is different. The total family income is the same in both cases, but in the group as a unit the average income per worker declines more slowly. Wages decline in both systems as follows:

<i>Individualistic</i>	<i>Collectivistic</i>
\$3,000 plus expenses	\$3,500 plus expenses
\$2,000 plus expenses	\$3,000 plus expenses
\$1,000 plus expenses	\$2,500 plus expenses
Expenses	\$2,000 plus expenses

In both cases rent represents the disadvantages of having to resort to a poorer quality of land. But in the individualistic economy the condition of the landlord is actually improved during the growth of general land poverty. The disadvantage is thrown upon the workers who do not own land, whose condition grows rapidly worse with resort to the poorer land. This is on the assumption, of course, that wages represent the discounted marginal product of labour, which might be true in this case if the farmer were sufficiently grasping and lacking in philoprogenitiveness. Rent in the collectivistic economy represents under static conditions the gradually increasing hardship of supporting a growing group on the same quantity of land. But the hardship is less, it is the same for all; and, if the burden is distributed over the whole group, a larger number can be supported, as the surplus of the rent received will be spread out over the labour income of the workers. Of course, as was demonstrated before, problems like this are a better illustration of the "law of the proportion of factors" than of the "law of rent." But they do illustrate the fact that collectivism is a more equalitarian, a more democratic institution than individualism. From the point of view of the democratic valuation, collectivism is a better, a more ethical institution. Von Wieser was right in thinking that rent would exist as a factor in a communistic society, but he did not realize that it would differ in form and effect. In the individualistic society it functions for inequality and privilege. In a collectivistic society it means only gradually harder conditions for the group as a whole. Wieser's habit of thinking in terms of imputation prevented him from perceiving the quantitative differences in rent in the two economies. The progress of rent in the hypothetical case given means that in changing from first to fifth grade land under the individualistic system wages decline from approximately \$6,000 to approximately \$2,000; while under the collectivistic system average individual returns decline from approximately \$6,000 to approximately \$4,000. Under the individualistic order wealth

would accumulate but men decay, while under the collectivistic order the same resources would support more men than could be supported in the individualistic economy, and at a higher modal income.)

The nature of interest in a collectivistic economy has already been suggested by the discussion of that topic in the chapter on Institutionalism. (The gist of this view is that in the collectivistic economy time preference would disappear. Time preference is a matter of individual calculation, but to the statesman who thinks objectively in terms of long-range social policies, the factor of time preference would cease to operate.) In other words, time preference is a factor only in the individualistic economy. To illustrate: a young man of twenty estimates a present sum of money more highly than a like sum twenty years hence. The reasons are, perhaps, that (1) there is only a certain probability that he will be alive at the age of forty. The sooner he spends the money the greater the probability that he will receive personal enjoyment from it. (2) Then even if he is extant at forty, there is a great probability that his sensibility, his capacity for enjoyment, will be less keen than it is in the more sensitive and impressionable period of youth. (3) Finally, there is a degree of probability that on the average his earning power and his income will be greater at forty than at twenty, so that, even if the other factors do not change, a given amount of money would mean more to him, money would have a higher marginal utility to him at twenty than at forty. These are all valid reasons for individual time preference for money or income.

But none of these conditions would exist for the statesman, the community engineer, the member of the Supreme Council of National Economy. He is not thinking in terms of his own personal preferences, and the preferences of his contemporaries whom he does not know personally are no more cogent than the preferences of the coming generation. The greater the statesman the more real is the future, or the more future reality is equated with present reality. The probable needs of

a man in Arizona thirty years from to-day are weighted as heavily as the putative needs of a man in New York to-day. In other words, in the merit system of politics time preference tends to disappear, as it does in the ultimate ethico-religious attitude *sub specie aeternitatis*. None of the reasons which justify time preference for the individual is valid for the collectivity. The average age of the group will probably be the same thirty years hence as to-day. The average sensibility will probably be the same, since there will be the same percentage of youth in the population. Average earning power, on the other hand, will probably not be greater, as the average man will not be older, more experienced, and in receipt of a larger salary. So the average marginal utility of money will not be less thirty years from now than it is to-day. Collectivistic calculations, then, can dispense with time preference, and so with interest payments.

Savings and the repair and provision for capital in the social economy can be made by the decisions of the central council to apportion more capital and labour to making machines and buildings and a less proportion of food, clothing, education, and recreation. This means a possibility of a less immediate consumption; an abstinence from certain consumers' goods in order to create better productive instruments and enjoy more consumers' goods or more leisure in the future. The abstinence is spread over the whole collectivity, and will probably involve a smaller average individual sacrifice, just as the burden of rent, being widely diffused, is probably less in the collective than in the individualistic economy.

(As one moves from atomic individualism toward the corporate form of social organization it seems that interest payment is less and less necessary as a means to social savings or the provision of more or better capital goods.) The successful industrial corporation provides for expansion and betterments out of the corporate surplus. And the owners of the common stock do not expect to draw interest on undistributed profits. They are compensated by the thought of a probable greater

future return or a better insurance against possible future loss. The government, the widest form of corporate organization, can secure means, say, to finance a war, by the sale of bonds at a rate of interest; and thus accept the principle of the time preference of individual investors. But it can also finance a war without interest payments by issuing fiat money. And it can finance a war by means of funds secured through the expansion of bank credit due to the institutional mechanism of central reserve banking. This does not necessarily involve interest payments, although, out of deference to traditional ideology and analogy to the individual economy, interest payments and the corresponding general abstinence from consumption may be made as a gratuity to the bankers. (All that is needed for savings or the provision of better capital goods in the collectivistic economy is that the group as a whole should consume less than it produces.)

This notion that time preference and so interest payments have no validity in the collectivistic policy, if adopted, might save a world of mental trouble. For example, it would have made unnecessary the school of public financiers who held that by extra taxation a government could secure a surplus fund which, if set aside at compound interest, would, in the course of time, increase so that the interest from it would support the government without the need of further taxation.¹ In other words, if in some time in the past a sufficient fund had been set aside, and had continually grown according to the curve of compound interest, the interest on the fund would now be \$100,000,000,000, or more than the present national income. The trouble with this argument is that, although it is mathematically unimpeachable, it runs foul of the fundamental economic "law of the proportion of factors." An equally logical deduction from the law of interest was that government should be financed by the sale of bonds in place of the conventional pay-as-you-go method of taxation.² If the govern-

¹ Cf. Bullock, C. J., *Selected Readings in Public Finance*, chapter xxv.

² *National Municipal Review*.

ment, through superior credit, can borrow for 4 per cent money that is worth 6 per cent in the general market, there is the implication that there is no limit to the possibility of the government getting rich by going in debt. The objection to this is that the government by large expansions of certain activities or undertakings makes them out of proportion to other complementary enterprises, so that the principle of diminishing returns operates. This, too, is an instance of the violation of the law of proportions.

Finally, there are the dilemma and the perplexities of the war debts. We, the people of the United States, advanced the Allies about \$12,000,000,000,000 to carry on the war and for rehabilitation. Assuming that the American people as a unit have a time preference for present over future means, we ask the Allies to pay us back \$22,000,000,000,000. We have already graciously cancelled about \$11,000,000,000,000 by reducing the rate of interest. Somehow the Allies seem to find it difficult to pay this reduced obligation. And the experts have continually to revise downward the amount that the Allies are able to pay. On the theory that time preference in the public economy is a fiction developed from the personal time preference of the individual economy, the whole problem of war debts could be greatly simplified. Assuming that the war loans were normal extensions of credit, and that the debts of the Allies, then, were bona fide debts, if they borrowed \$12,000,000,000,000, they should be expected to repay \$12,000,000,000,000. If these \$12,000,000,000,000 should be repaid over a period of thirty, forty, or sixty-two years, the present cash value of the debt would still be \$12,000,000,000,000. Probably this mode of thinking would be unthinkable to a banker-statesman, because he has been conditioned in a different habit pattern of thought. Perhaps on the assumption of a national time preference the whole debt difficulty could be obviated without any lesion of public credit. A normal rate of 5 per cent interest on the debt might be charged, but a moratorium of interest payments established for one hun-

dred years. At that time the accumulated unpaid interest would be \$60,000,000,000,000, and the total payments due \$72,000,000,000,000. However, the present cash value of the total debt on the compound interest principle, at 5 per cent interest, would be only about \$550,000,000,¹ which could be liquidated by two of the average recent annual payments. It might be noted that this assumption that a nation or a large society of people has a time preference for money is a sort of personification of the group, and so is a good example of what Allport calls the group fallacy or the nationalistic fallacy.

To return to the theory of von Wieser that interest will exist in a collectivistic economy, our conclusion is that interest in the sense of the cost of providing more or better capital will exist in the form of a diffused general restriction of consumptive goods in favour of more capital goods, but that no payments of interest to individuals will be made on the basis of individual abstinence from consumption. The saving will be done socially, and since the group as a whole has no time preference, savings mean simply making a better proportioning of the various economic factors so that the total social utility or the general welfare is enhanced. In other words, abstinence from more or better food, clothing, and housing, in order to secure more or better railroads, trucks, or electric generating plants is on the same principle as abstaining from a better motor-car in order to buy more fresh fruit and vegetables. It is part of a more scientific social budget of expenditures which will bring greater utility or welfare from a given amount of economic energy. And the fact that the return from the capital goods is farther in the future than the return from an equal amount of economic energy applied to immediately consumable goods does not subtract from the utility of an amount measured by average interest, because the group as a whole does not have time preference. Assuming stability of

¹ Present worth of single payment of \$1 one hundred years from now at 5 per cent interest is \$.007604.

the price level, the value of money to the group will be just the same twenty or thirty years from now as to-day. (A better distribution of capital and labour as between all kinds of consumers' goods, as between consumers' goods and capital goods in general, and as between economic goods and non-economic activities: this would apportion energy in all different lines of human interest in proportion to the needs and the ultimately desirable wants of mankind. It would conform to the law of proportion, to the principle of maximum satisfaction, and it would probably eliminate industrial depressions.)

So rent and interest as individual distributive shares disappear in the collectivistic economy, and remain merely as more or less hard general social conditions. Profits as an individual distributive share also disappear. If pure profits mean profit above wages of management, interest on operator's capital, and insurance against risk, then pure profit alone would disappear in a socialized society. Capital and insurance would be provided by the collectivity, wages would be the normal form of individual remuneration. And pure profits would be socialized into group savings of higher wages. This form of social economy would be more democratic, more equalitarian than the partial individualism of America and most of Europe. Whether it would conform more to the welfare ideal, would conduce more to the good life, would depend on the specific character of the real income secured by the wage payments, and by the prevailing pattern of non-economic activities. Under the collectivistic economy the only economic law that would be accepted would be the law of the proportion of factors, although this, as in the individualistic economy, could be understood in terms of its constituent factors and aspects. The law of demand and supply, like the laws of rent, interest, and profits, would be the individualistic aspects of this universal economic law.

CHAPTER XIV

SUMMARY

THE thesis of this book developed out of studies in modern economic theory and psychology. Then there was undertaken a review of the main development of economic theory from the Middle Ages to the present time as a test or verification of the thesis, and as a source of illustrative material. It was assumed in the hypothesis and seems to have been verified in the historical review that economic thought has had something of an orderly development, that it has not been merely the product of speculation by various independent thinkers, but from it there has evolved material out of which can be developed a series of harmonious generalizations, which may be found useful as tools or standards in the solving of specific economic-social problems. The thesis of the book is that economic or industrial life has constituted a changing and evolving process, being fairly simple in earlier ages but growing in complexity with the passing of time. Control of economic life has involved logical analysis of a given economic situation, and this has developed the idea of constituent or complementary factors and the idea of co-operating or conflicting economic classes. The primary general factors of land, labour, and capital develop by evolution and differentiation into an indefinite number of units in the economic analysis. Some of these units develop into great importance in the economic system so that the evolving factor and the resulting social and intellectual adjustments colour the whole economic thinking of the time. The rise of a new factor to a position of importance, the new economic potentialities its development reveals, until it grows to the optimum size according to all the potentialities of the situation gives us an historic or secular trend in economic development and a parallel trend in the development of economic thought. This secular trend in industrial

life may be precipitated in logical analysis into one of the specific schools of economic thought. That is, historic economic theories are rationalizations of industrial secular trends. At different times there has emerged some new factor out of the evolution and interaction of the more primitive system. It has proved to be greatly expansible, and so a backward or limiting factor relatively to the potentialities of the time. The problem, then, has been to increase this factor more rapidly in a quest, perhaps for the most part unconscious, of an optimum combination and proportion of factors which would constitute the best possible utilization of the economic means of the time. Thus the canonist doctrine theorizes the need of order and proportion and regulation of economic life by means of a benevolent and paternal centralization. It envisages an attempt at regularization of industry at a time when growing complexity was still thought as possible of control through the attitudes and agencies developed in the age when the family, the tribe, or the local group were independent economic units. Mercantilism theorizes the discovery of the possible advantages of trade because of geographic or regional advantages in the production of different kinds of goods. The rise of the autocratic monarchy was the political parallel to the secular trend in industrial life and economic thought, since political centralization was necessary in order to do away with local barriers to trade. Physiocracy rationalized the discovery of the advantages of the application of science and invention to agriculture, and of a new proportion of factors in farming—~~large units consisting of more land, more capital, and greater intelligence and managerial skill.~~ Classical English economics rationalized the discovery of the great potentialities for production of the division of labour, the invention of machinery, the accumulation of capital to support these two productive trends, and the great significance of enterprise and managerial skill, a willingness to experiment in the newer and more complex economic world, and to combine the novel elements into a more and more efficient productive organization. On

the side of distribution classical theory was largely a rationalization or justification of the large individual shares of the growing social income that were taken by the men who represented the backward and expansible, the limiting, and hence the most significant factors in the new economic complex. Marginism represented a rationalization of factors which had been neglected in the classical analysis, a rationalization produced by men with special mathematical training. German historical economics was largely a protest by men trained in history against the implication of the classical economics that the Industrial Revolution was coextensive with universal history, and that ethics was nothing more than the self-interest of the men who inherited or accumulated capital or who furnished industrial initiative. It also may be said to have been a reaction against the assumption that the only regulator of industrial life was the price system and the money market. The newer capitalism is a theorizing from the point of view of leaders of industry at the time when the development of the Industrial Revolution has proceeded so far that machines have become the major factor in production, and overhead cost the major factor in financial analysis. Welfare economics arises at a time when the development of production has been so great that more than the basic necessities are produced for a vastly increased population. Men trained in traditional literary culture speculate how production and consumption can be so controlled that men in the mass can achieve the maximum well-being according to the standard of ultimate valuations. Institutional economics is a reaction against certain deductions from the classical analysis, especially in respect to so-called economic laws. The institutionalists hold that economic behaviour is not controlled by certain all-powerful, external entities called economic laws, but that laws or economic generalizations are merely deductions from human behaviour. Since human behaviour is in part at least creative and spontaneous, institutionalism justifies reform, experiment, and optimism. Finally, collectivism on the basis of the institutional

approach would organize economic life in the interest of all the people. On the assumptions of this social project, the basic so-called economic laws—the law of supply and demand, and the laws of rent, interest, and profits disappear or are transformed into one larger generalization, called the law of the optimum proportion of factors. The classical so-called laws appear only as ways in which the law of proportion operates under the peculiar premises, the institutional conditions, assumed in the classical analysis.

The result of this historic review is to justify and approve historically, that is, on the relativistic approach, of all of the historic schools of economic thought, both as interpretations of the times and as contributions to a permanently valuable body of economic generalizations. As to present conditions, however, the analysis leans to a preference for an economic outlook compounded of welfare, institutionalist, and collectivist elements rather than of classical, marginist, and newer capitalism elements. While the contributions of these latter three schools are of great significance in their time and place, it seems now that the other schools are contributing the more useful generalizations. The wheel of change seems to have completed a revolution so that the present economic problem seems to be to realize on a large scale, a world order, the regularization of industry that was achieved for a time and on a small scale by the frontier family and by the local economy of the Middle Ages.

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APPENDIX

QUESTIONS FOR ECONOMIC ANALYSIS

1. Is the author conservative or radical with respect to current economic theory?
Does he accept or oppose the dominant type of economic theory of his time?
Does his work represent an implicit or explicit defence of the existing economic order?
2. Does the author exhibit indebtedness to other disciplines or sciences—philosophy, psychology, history, anthropology, sociology, political theory, law, ethics, biology, mathematics, physics, etc.?
3. Is he religious, irreligious, or indifferent to religion?
4. Is his approach logical, emotional, or based on realistic observation or experience?
5. Does he employ a mathematical or statistical method of exposition?
6. In psychology, does he adopt a rationalistic, "enlightened self-interest" view, the more explicit doctrine of hedonism, or the economic man, intuitivism, the instinct psychology, "behaviourism," etc?
Or does he insist that economics and psychology are independent sciences?
7. What is the author's attitude toward ethics?
Does he assume a harmony between ethical principles and economic laws?
Does he consider the economist as a social reformer?
Does he approach such subjects as the division of labour, competition, inequality, and private property from the ethical point of view?
Or does he assume or insist that economics is a separate, distinct science, which has nothing to do with ethics?
8. What is the author's position with respect to optimism and pessimism?
Does he look forward to economic betterment for society as a whole?
Does he look for improvement for certain classes only?
Specifically, what hope does his system hold for the labouring classes?
Is the author a Malthusian; and if so, does he emphasize the positive or the preventive check on population growth?

9. Does he emphasize the deterministic power of economic laws, or does he assume that human plans and purposes can be executed with scant consideration for economic laws?
Does he assume a fundamental harmony or conflict between reform and economic laws?
What specific economic laws does he formulate?
10. What are the author's class sympathies?
Does he prefer the landed aristocracy, the manufacturing and commercial classes, the inventors and scientists, the capitalists who accumulate save and invest money, scholars, and artists, the wage-earning class, farmers?
Is he aristocratic; does he accept class distinctions, differential rights and privileges, gradations of worth and honour; or does he object to economic and social inequality?
11. Does he attribute differences of social value or importance to different occupations, such as agriculture, manufacture, commerce, domestic trade, foreign trade?
12. Is he individualistic or collectivistic?
13. Does he believe in "natural" law; and if so, what is his conception of it?
14. Does he assume a static, absolutistic, universal order, or continual evolution or change?
15. Does he put more emphasis on production, value and distribution, or consumption?
16. Does he emphasize exchange value, or use value (total utility)?
17. Does he deal with the time factor—the short time, the longer time, historic or economic stages, cyclical or secular trends, etc.? What are his views of the normal relations, rates of growth of, natural resources, population, capital, industrial improvements?
18. Does he assume specific causatism, such as attributing value to labour, economic progress to capital, etc.; or does he look upon economics as a problem of the reciprocal action of various factors, such as land, population, capital, government, money, organization, science and invention, etc.?
19. Which does he assume as more fundamental, property or personality?
20. What does he assume to be the most important factor, the possessor of which should be honoured, rewarded, and privileged: labour; labour organization (division of labour); natural resources; discovery and invention; industrial qualities, such as industry, ambition, and initiative; saving and accumulating money (frugality); law and order (government); foreign trade; demand, or the market?

21. Does he tend to ignore or appreciate the distinction between the barter and the money economy?
Does he distinguish between the processes of making goods and making money?
22. Summarize his view of rent. Compare his view of rent with that of Ricardo as a norm.
23. Summarize his view of interest.
24. Summarize his view of profits.
25. Summarize his view of wages.
26. Does he emphasize the distinction between "productive" and "unproductive labour"? If so, what does he mean by "unproductive" labour? How would you explain the definition—by reference to the philosophy of Locke, by the quality of English government in a given period, by the law of proportion, or by the technological phase of the Industrial Revolution?
27. Does he believe that there is an inverse relation between profits and wages, rent and wages, rent and profits?
28. Does he look on government expenditure as relatively productive or unproductive?
Does he want more or less governmental activity?
29. In his discussion of taxation, what is his emphasis as regards productivity, economy, efficiency, and equality?
30. Is he in favour of proportional or progressive taxation?

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